

BALL SEEDS 1963

▶ *Tiffy-Strips*

▶ A NEW WAY TO GROW AND
SELL BEDDING PLANTS

It was a good year...

...and we needed it! After several seasons of cold, wet springs, Mother Nature smiled on us last year — or at least most of the country — and most bedding plant growers and sellers chalked up a record season.

And another good season is expected this year.

So we suggest that you lay in plenty of seed*, paks and pots**, tune up your advertising apparatus, keeping your fingers crossed, and together we will roll through another successful season.

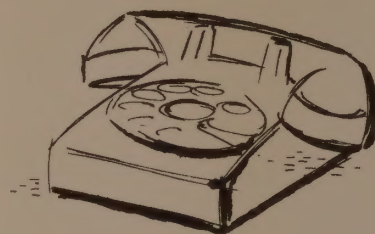
The Ball Brothers

*Some of our trade friends tell us that this publication looks less like a catalog each year. Just to make sure you understand that we are trying to sell seeds, please turn to page 42 and look over some worthwhile new Petunias; and don't miss the built-in sales opportunities offered by Thumbelina Zinnia, the first Gold All-America Award winner in twelve years.

**Jiffy-Strips are *in* this year. See page 125.

We're as close to you as your nearest...

WEST CHICAGO 231-3500



Our switchboard is open 8:00 A.M. to 5:00 P.M. Monday through Friday, and 9:00 A.M. to Noon on Saturday. (Central Standard Time November through April; Central Daylight Time May through October.) However, please note that we do not have staggered lunch hours and department personnel who can best discuss specific orders are generally not available between 12:00 Noon and 1:00 P.M. Our Grower Service Department personnel handle calls during that hour. If you are in a time zone different from ours or do not have Daylight Savings Time in the Central zone, check carefully on the time in West Chicago before making station to station calls.

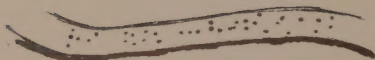
Some growers like to call in inquiries or orders in the evening. To facilitate this, we have attached a Bell System tape recorder to our phone lines so that your message may be recorded. Please note that this service operates on all incoming **station to station calls** after business hours. You will be charged by your local phone company for the call, whether you leave a message or not. If you must talk to **some one individual** in the office, call during business hours only. Our number is West Chicago 231-3500. (For direct distance dialing, dial 312-231-3500.)

We are closed on national holidays. Our West Chicago warehouse is not open for business on Saturday.

twx Our number is WEST CHICAGO ILL 2629. Our **TWX** operator is on duty during our regular business hours.

post office We have six incoming and 5 outgoing mail deliveries each day for quick handling of your order. Note: In writing about your order, please write to West Chicago; do not write to the warehouse involved. We can handle it more efficiently from here.

expressway We are located 35 miles west of downtown Chicago. Watch for our sign (2 miles west of the intersection of Rt. 59 and U. S. Alternate 30 (Roosevelt Rd.)). If you drive to or from Chicago, be sure to use Congress St. and Illinois East-West Tollway. Leave or enter Tollway at Rt. 59.



Your Salesman

Our sales representatives cover the country, listed by area below.
If you are not sure which one should call on you, drop us a line
and we will ask him to call.

MIDWESTERN REGION

Missouri, Kans., Nebr., N. Okla.
Vern Potteiger, 700 E. Birch St., Independence, Kansas
Ph. 316-ED 1-3499.

Rocky Mountain States.
Dan Bailey, 1209 Newsom St., Ft. Collins, Colo.
Ph. 303-HU 2-1604.

Wisc., Upper Mich.
Ben Luther, 7026 S. Phyllis Lane, Franklin, Wisc.
Ph. 414-GA 5-4050.

Chicago Area, S.W. Mich., N.W. Ohio.
Clarence Bahnfleth, 636 Joliet St., West Chicago, Ill.
Ph. 312-231-2097.

Indiana, Kentucky.
Bud Dunn, 1431 Woodland Ave., West LaFayette, Ind.
Ph. RI-3-2293.

E. Ohio, W. Penna., West Va.
Harold Innis, 5522 Dartmouth Ave., Canfield, Ohio.
Ph. 216-LE 3-4484.

N. & W. Minn., W. Iowa, E. Mont., No. & So. Dakota.
Vince Nierste, Box 8361, Minneapolis 16, Minn.
Ph. 612-922-5805.

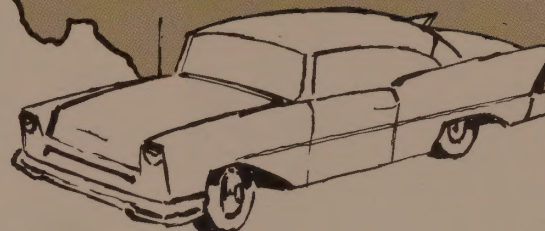
Ill. (exc. Chicago Area), St. Louis, Mo. Area.
Bob Shoenhair, Rt. 8, Box 351, Centerville Rd., Rockford, Ill.
Ph. 815-962-1759.

E. Iowa, S.E. Minn., W. Wisc.
Bob Whitman, Springville, Iowa. Ph. 319-447-5243.

Michigan.
Si Randolph, 3568 Mason Rd., Rt. #2, Howell, Mich.
Ph. Howell 1860.

Chicago Area.
Blaine Stuhlsatz, Town Rd., Box 161, West Chicago, Ill.
Ph. 312-231-0211.

West & Cent. Ohio.
Carl Weals, 111 Wyandot Place, Hilliard, Ohio.
Ph. 614-TR 6-5243.



NORTHEASTERN REGION

S.W. Conn., Long Island, N.Y.
Rocky Calamia, 271 Janes Lane, Stamford, Conn.
Ph. 203-DA 2-1863.

Northern 2/3's of New Jersey.
Frank Drab, RD #1, Pleasant Hill Rd., Chester, New Jersey.
Ph. 201-TR 9-5532.

Upstate New York.
Hi Emerson, 61 Reed Street, Geneva, New York. Ph. 2618.

Conn., Rhode Island, N.E. New York.
Cliff Erickson, East Hill Rd., Canton, Conn., Ph. 203-OW 3-8636.

Md., Dela., So. Cen. Penna., Wash. D.C.
Bill Franklin, RFD 3, Box 283, Cockeys Mill Rd., Reisterstown, Md., Ph. 301-TE 3-0780 or TE 3-2456.

No. & Cent. Penna., S.E. New York.
Bill MacDonald, 902 Moosic Rd., Old Forge, Penna.
Ph. 717-GL 7-2393.

S.E. Penna., So. New Jersey.
Clint Miller, 324 S. 22nd St., Allentown, Penna.
Ph. 215-434-0823.

Maine, Vt., N.H., N.E. Mass.
Jim Tufts, 196 High St., Exeter, New Hampshire.
Ph. 603-PR 2-3483.

Massachusetts
Kenn Tufts, Flag Rd., Southboro, Mass. Ph. 617-485-4387.

SOUTHERN REGION

Ala., N.W. Fla., W. Ga., Cen. & E. Tenn.
Robert C. Chase, 406 Arthur St., N.W., Huntsville, Ala.
Ph. 205-534-0577

Ark., Miss., La., W. Tenn., Cen. Okla.
Bill Fisher, 5161 Ridgewood Rd., Jackson 6, Miss.
Ph. 601-EM 2-1124.

Texas, S. Oklahoma.
Cliff Kraft, 3350 Valiant Dr., Dallas 29, Texas.
Ph. 214-FL 7-5852.

Virginia, No. Carolina.
Norm Lamberg, P.O. Box 3031, Greensboro, North Carolina.

Florida, E. Ga.
Bob Mitchell, Jr., 3668 Bougainvillia Ct., Winter Park, Fla.
Ph. 305-MI 7-7776.

So. Car., S.E. No. Car.
Lee Elledge, Route 5, Greenwood, South Carolina.
Ph. 803-OR 8-3904





**Charles L. Weddle,
Paonia, Colorado.**

Originator of the leading line of F_1 hybrid Petunias which have literally changed the gardens of America with new colors. More recently Snapdragons have come under Mr. Weddle's influence and the magnificent Rocket Series has resulted. Trained at Texas Technological College with graduate work at Michigan State University and Cornell University, Mr. Weddle received valuable, practical training with the Burpee Seed Company before starting his own firm after the war. He is shown observing new crosses of F_1 hybrid Petunias at Paonia.

Hats off to the flower breeders of the world!

New varieties are developed, to paraphrase Edison's famous remark, by ten percent genius and ninety percent plain hard work. We are picturing on this page three of the world's leading plant breeders whose varieties appear throughout this catalog. These three men with widely differing backgrounds have several things in common — like plant scientists everywhere they are keen observers, men of high intelligence, and above all patient, hardworking plantsmen.

If you think of what we owe them and many other men like them who are engaged in horticultural plant improvement, you conclude that without their work, plant growers would have little to offer to the gardening public and our bedding plant business would be a fraction of its present volume. They have fashioned the tools of our business. Thanks to them and their predecessors, their diligence and purposefulness, remarkable improvement has been made in these tools.

Our hats are off to plant breeders everywhere who help keep our business vital!



T. Sakata, Yokohama, Japan.

It is difficult to beat Mr. Sakata's record for a lifetime dedicated to plant improvement. He was the first commercial grower of double Petunias and his pre-war strains won many coveted All-America awards. More recently he has turned attention to a wide range of species, including Pansies, Dianthus (He created last year's All-America Selections award winning Dianthus, Bravo.), Celosia, and Primulas. American gardeners owe much to the imagination and energy of this gentleman from Japan.

K. Roggli, Thun, Switzerland.

Originator of the modern Swiss-type Pansy. Mr. Roggli's strain of this important subject has for many years set the standard of excellence by which all other Pansy strains are judged. His strains of Lupines and vegetables indicate the wide range of interests he has in plant improvement. However, Pansies are his main interest. His strains dominate the gardens of Europe where the climate permits Pansies to be grown more widely as an annual or bedding plant.



"Extra" quality strains

"You buy not the seed alone — you buy its pedigree as well." Is it a question of uniformity in *Salvia*, stem strength in Snapdragons, flowering date of Petunias (many growers want them to bloom in the flat)? The continuing quality of the strain which was developed by its originator and has been maintained by the seed grower, must be thoroughly checked, and there's only one way to do this — to grow the plants under actual forcing conditions — greenhouses for Snaps, trial grounds for Petunias, frames for Pansies, etc. In this way the knowledgeable seedsman can select the best quality strains available and supply them to his customers. Any seedsman who claims to be selling you "only the best," yet cannot back his claim with trials, is doing only half a job.



Above left: It takes experienced, trained plantmen to observe the fine distinctions between strains and varieties, which distinctions can sometimes put extra profit into a Snap crop or other florist items.



Right: Major seedsmen must protect their customers by having heavy selling varieties of annuals from more than one source to avoid crop failures. Yet the performance of several strains must be checked yearly for quality, uniformity, etc. Trial grounds are also used to take data for describing new and standard varieties for catalog purposes.

Some not-so-little "Extras" in Ball Service

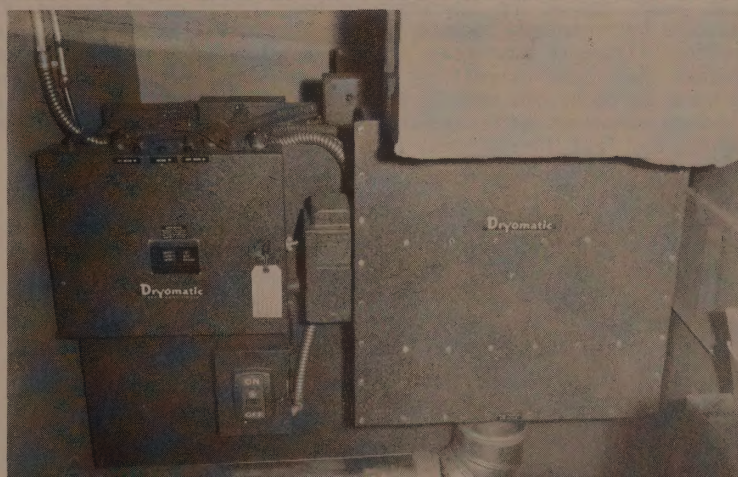
"Extra" plants per ounce.

"It is not the seeds per ounce, but the plants per ounce, which you buy."

Seedsmen have known for years that high levels of humidity tend to destroy the germ of seed in storage. Hot, moisture-laden air during the summertime is the worst offender. Also, fluctuations in humidity levels cause premature death of seed germs. Before bedding plants got to be "big business" and costly hybrid seeds required storage, little attention was paid to this vital matter. But bedding plant growers and other seed buyers have learned that they have a right to expect proper humidity and temperature controlled storage from their seedsman in his warehouse.

The entire storage area above is vapor sealed with aluminum foil, special paints, and double doors with moisture-proof areas between to minimize the load on the equipment and maintain proper uniform levels of humidity. Our Dry-O-Matic equipment, in collaboration with large air conditioning equipment, balances humidity and temperature year around in this 4,000 sq. ft. seed storage room.

Several years ago Geo. J. Ball, Inc. installed the first year around fully automatic temperature and humidity controlled flower seed warehouse — temperature year around 75° F. and humidity 25% relative. This keeps new and carried-over seed alike at optimum storage conditions assuring our customers of maximum possible plants per ounce.



Put These Sweet Sixteen.. Properly used, they will do the job of an extra sales clerk..



Poster

YOU GET THIS FREE

If you started from scratch to take the pictures, make plates, print several copies of this poster for yourself, it would cost you about \$5,000. So you can see it is well worth hanging where it will command the most attention — silently answer the most questions, and sell the most annuals for you. This poster will be sent to all our regular bedding plant seed customers in early February. Reserve a strategic place for it. Be sure to have in good supply all varieties which are featured on it. This valuable poster is tinned on top and bottom and sprayed with plastic for long life. **Note:** Many wholesale bedding plant growers bought extra copies last year to hand out to their customers for display at the point-of-sale. Why not try this with your sales outlets — they will appreciate this attention as much as the good work the poster will do for them. We supply extra copies at **50c** each, our cost.



Sweet Sixteen Stuffer

This stuffer or bedding plant pamphlet is crammed full of pictures of annuals in use and planting ideas written by a leading garden authority. You can be sure it will pay to hand these out to your customers to take home, or even better, mail them out with bills or to your entire customer list in the early spring. The stuffer is designed as a self-mailer if you prefer to use it that way. **Note:** This year this pamphlet will be shipped in an attractive display box convenient for hanging in a suitable place where your customer may "take one." Do you make speeches to garden clubs? These are ideal to hand out on such occasions.



100 to 900, **\$2.00** per 100; 1000 or more, **\$17.50** per 1000. Order in multiples of 100. Net prepaid.

Plastic Picture Labels

But they're really well worth it. Fantom & Gahs near Baltimore started using them two years ago at the insistence of their retail outlet buyers. Their business has doubled because their bedding plant sales package is more attractive than their competitors'. Think of the money Americans spend each year on packaging and you will realize that these long-lasting four-color labels in plastic with cultural information printed on them will help to bring your bedding plant package offer into step with modern American merchandising techniques. The value of your offering is enhanced by the fact that the customer may take the label with its cultural information along home.



Picture Label Prices. See variety list on opposite page. **Individual labels** available in units of 50 of any one variety. Order in multiples of 50. **Minimum order 300.** Up to 950 labels, **\$2.25** per 100; 1000 to 4950, **\$2.10** per 100; 5000 to 19,950, **\$1.90** per 100; 20,000 up, **\$1.80** per 100. Net, prepaid.

Sets of 10 each of 32 Sweet Sixteen varieties, total 320 labels, **\$6.50.** Net, prepaid.

Sets of 50 each, 32 Sweet Sixteen varieties, total 1600 labels, **\$30.00.** Net, prepaid.

..Sales Aids to Work for You!!!

what can be more welcome on a busy weekend in May?



Jumbo Picture Cards

Designed to mark clearly the location of each Sweet Sixteen variety in the sales area. Printed in full color on durable, heavy, pure white paper — water resistant. Room for pricing. Can be hung over benches, stapled to plant labels, etc.

Jumbo Picture Card Prices. See variety list below.

Individual cards available in units of 10 of any one variety. Order in multiples of 10. **Minimum order 100 cards.**

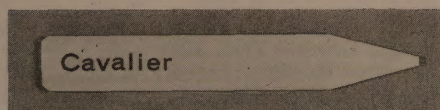
\$3.00 per hundred. Net, prepaid.

Set of 1 each of 70 varieties, **\$1.50.** Net, prepaid.

COMANCHE
F. HYBRID MULTIFLORA PETUNIA



SWEET SIXTEEN PRINTED POT LABELS



Use these clearly printed labels, available in all Sweet Sixteen varieties, plus 150 other varieties (write for list). 4 x 5/8 inches. Pkg. of 100 any one variety, wood **60c**, plastic

75c; 1000 of any one variety, wood **\$5.30**; plastic **\$6.50**, net prepaid. Minimum order, 100 of one variety. For unprinted wood and plastic pot labels, see page 128.

AND ... HERE'S ANOTHER BALL SERVICE TO BEDDING PLANT GROWERS — GRATIS!

Ball's Ad Builder. With these proofs you can put ads together as easily as a child handling blocks. Write your own personalized copy — you know your customers best. Then illustrate with pictures from the Ad Builder. You tell us which ones you want to use in your ad and we will send you mats which you can give to the newspaper editor and he can use directly to make plates to

illustrate your ad — saving you over \$7 per illustration. Or, if you are too busy to put the ads together, there are some complete ads which you can use — only putting your name across the bottom. A copy will be mailed with the Sweet Sixteen Poster. Write for extra copies.

PICTURE LABELS AND JUMBO PICTURE CARDS AVAILABLE

VARIETY	PLASTIC PICTURE LABELS	JUMBO CARDS	VARIETY	PLASTIC PICTURE LABELS	JUMBO CARDS	VARIETY	PLASTIC PICTURE LABELS	JUMBO CARDS
Ageratum Blue	X		Petunia Ball All-Dbl. Mix	X	X	Petunia Presto		X
Ageratum Blue Mink	X	X	Petunia Ballerina	X	X	Petunia Prima Donna Imp.	X	X
Alyssum Carpet of Snow	X	X	Petunia Bingo	X	X	Petunia Red Cascade	X	X
Alyssum Royal Carpet	X	X	Petunia Blue Lace		X	Petunia Red Satin	X	
Aster Ball Florist Mix	X	X	Petunia Blue Lustre	X		Petunia Sabre Dance	X	X
Aster Crego Mix	X		Petunia Blue Magic	X	X	Petunia Satellite	X	X
Balsam Dbl. Bush Flwd.	X		Petunia Calypso	X	X	Petunia Snow Magic		X
Basil Dark Opal	X		Petunia Caprice		X	Petunia Sonata	X	X
Begonia Organdy	X		Petunia Cardinal		X	Petunia Sugar Plum	X	X
Calendula Mix	X		Petunia Cavalier	X	X	Petunia Tango	X	X
Carnation Chab. Form. Mix	X	X	Petunia Cherry Tart	X	X	Petunia Toreador		X
Celosia Forest Fire	X		Petunia Chiffon	X	X	Petunia Venus	X	X
Celosia Toreador	X		Petunia Comanche Imp.	X	X	Petunia Wh. Cascade	X	X
Cleome Pink Queen	X		Petunia Comet	X	X	Petunia Wh. Magic	X	X
Coleus Ball St. Color Mix	X	X	Petunia Coral Satin	X		Petunia White Satin	X	
Dahlia Unwin's Dwf. Mix	X	X	Petunia Crusader	X	X	Petunia White Velvet	X	X
Dianthus Bravo	X	X	Petunia Cal. Gts. #1	X		Phlox Twinkle	X	
Delphinium Pac. Gts. Mix	X		Petunia Fandango		X	Phlox Globe Mix	X	X
Geranium Red	X		Petunia Fire Dance	X	X	Portulaca Dbl. Mix	X	X
Impatiens Dwf. Mix	X	X	Petunia Glitters	X	X	Salvia Dwf. (Red)	X	X
Lobelia Crystal Palace	X		Petunia Honey Bunch		X	Salvia St. John's Fire	X	X
Marigold Climax Yel.	X		Petunia La Paloma	X	X	Salvia Tall (Red)	X	
Marigold Color Magic	X	X	Petunia Lav. Lace		X	Snap Hit Parade	X	
Marigold Crackerjack	X	X	Petunia Linda	X	X	Snap Rocket Mix	X	X
Marigold Cupid	X		Petunia Lyric	X	X	Stock Hi-Dbl. Mix	X	
Marigold Dwf. Br. Yel.	X		Petunia Matador	X	X	Sweet William Mix	X	
Marigold Dwf. Orange	X		Petunia Maytime	X	X	Verbena Ideal Mix	X	X
Marigold Petite Mix	X	X	Petunia Mercury		X	Vinca Mix	X	
Marigold Spry	X		Petunia Mixed	X		Zinnia Cactus Mix	X	
Marigold Spun Gold	X	X	Petunia Neptune	X	X	Zinnia Dahlia Flwd. Mix	X	X
Nierembergia Purple Robe	X		Petunia Nocturne		X	Zinnia Lilliput Mix	X	
Pansy Ball Gt. Mix	X		Petunia Paleface	X	X	Zinnia Merry-Go-Round	X	X
Pansy Jumbo Mix	X		Petunia Pk. Cascade	X	X	Zinnia Old Mexico	X	
Pansy Roggli Mix	X		Petunia Pink Magic	X	X	Zinnia State Fair		X
Petunia Allegro		X	Petunia Pink Satin	X		Zinnia Thumbelina	X	X
Petunia Aztec		X	Petunia Pink Velvet	X	X	Green Pepper	X	
			Petunia Polaris	X	X	Tomato	X	

Sweet Sixteen Collections for 1963

Order Collections by Letter — We cannot substitute within collections.

PETUNIAS	Collection A
Ball All-Double Mix	½ Tr. Pkt. \$ 2.50
Blue Magic	Tr. Pkt. 2.75
Calypso	Tr. Pkt. 2.75
Cavalier	Tr. Pkt. 2.75
Cherry Tart	½ Tr. Pkt. 1.50
Comanche Imp.	¼ oz. 5.50
Crusader	½ Tr. Pkt. 1.50
Maytime	½ Tr. Pkt. 1.50
Paleface	½ Tr. Pkt. 1.00
Pink Magic	1/128 oz. 4.75
Pink Velvet	½ Tr. Pkt. 1.00
Satellite	½ Tr. Pkt. 1.00
Sugar Plum	½ Tr. Pkt. 1.00
Tango Imp.	Tr. Pkt. 2.75
White Cascade	Tr. Pkt. 2.75
White Magic	1/128 oz. 4.75
CATALOG PRICE	\$39.75
Less 8% Discount	3.18
SWEET 16 COLLECTION A	\$36.57

PETUNIAS	Collection B
Ball All-Double Mix	Tr. Pkt. \$ 4.00
Blue Magic	Tr. Pkt. 2.75
Calypso	Tr. Pkt. 2.75
Cavalier	Tr. Pkt. 2.75
Cherry Tart	Tr. Pkt. 2.75
Comanche Imp.	¼ oz. 10.00
Crusader	Tr. Pkt. 2.75
Maytime	Tr. Pkt. 2.75
Paleface	Tr. Pkt. 1.75
Pink Magic	¼ oz. 8.75
Pink Velvet	Tr. Pkt. 1.75
Satellite	Tr. Pkt. 1.75
Sugar Plum	Tr. Pkt. 1.75
Tango Imp.	Tr. Pkt. 2.75
White Cascade	1/128 oz. 4.75
White Magic	¼ oz. 8.75
CATALOG PRICE	\$62.50
Less 8% Discount	5.00
SWEET 16 COLLECTION B	\$57.50

PETUNIAS	Collection C
Ball All-Double Mix	1/128 oz. \$ 7.60
Blue Magic	1/128 oz. 4.75
Calypso	1/128 oz. 4.75
Cavalier	1/128 oz. 4.75
Cherry Tart	1/128 oz. 4.75
Comanche Imp.	¼ oz. 19.25
Crusader	1/128 oz. 4.75
Maytime	1/128 oz. 4.75
Paleface	1/128 oz. 3.00
Pink Magic	¼ oz. 16.75
Pink Velvet	1/128 oz. 3.00
Satellite	1/128 oz. 3.00
Sugar Plum	1/128 oz. 3.00
Tango Imp.	¼ oz. 8.75
White Cascade	¼ oz. 8.75
White Magic	¼ oz. 16.75
CATALOG PRICE	\$118.35
Less 8% Discount	9.47
SWEET 16 COLLECTION C	\$108.88

ANNUALS	Collection D
Ageratum Blue Mink	Tr. Pkt. \$ 0.50
Alyssum Carpet of Snow	¼ oz. .40
Aster Ball Florist Mix	Tr. Pkt. 1.75
Coleus Ball St. Color Mix	Tr. Pkt. 2.50
Dahlia Unwin's Dwf. Mix	Tr. Pkt. .30
Dianthus Bravo	Tr. Pkt. .90
Impatiens Dwf. Mix	Tr. Pkt. 1.10
Marigold Crackerjack	Tr. Pkt. .55
Marigold Petite Mix	¼ oz. 1.00
Phlox Globe Mix	Tr. Pkt. .85
Portulaca Double Mix	Tr. Pkt. .45
Salvia St. John's Fire	¼ oz. 2.75
Snapdragon Rocket Mix	Tr. Pkt. 1.75
Verbena Ideal Mix	Tr. Pkt. .75
Zinnia State Fair Mix	¼ oz. .35
Zinnia Thumbelina	Tr. Pkt. .85
CATALOG PRICE	\$16.75
Less 8% Discount	1.14
SWEET 16 COLLECTION D	\$15.61

ANNUALS	Collection E
Ageratum Blue Mink	Tr. Pkt. \$ 0.50
Alyssum Carpet of Snow	½ oz. .60
Aster Ball Florist Mix	Tr. Pkt. 1.75
Coleus Ball St. Color Mix	¼ oz. 3.30
Dahlia Unwin's Dwf. Mix	½ oz. 1.25
Dianthus Bravo	¼ oz. 1.65
Impatiens Dwf. Mix	Tr. Pkt. 1.10
Marigold Crackerjack	¼ oz. 1.00
Marigold Petite Mix	½ oz. 1.50
Phlox Globe Mix	¼ oz. 2.65
Portulaca Double Mix	Tr. Pkt. .45
Salvia St. John's Fire	1 oz. 9.00
Snapdragon Rocket Mix	¼ oz. 5.50
Verbena Ideal Mix	¼ oz. 2.00
Zinnia State Fair Mix	1 oz. 2.75
Zinnia Thumbelina	¼ oz. 5.00
CATALOG PRICE	\$41.45
Less 8% Discount	3.32
SWEET 16 COLLECTION E	\$38.13

ANNUALS	Collection F
Ageratum Blue Mink	¼ oz. \$ 1.35
Alyssum Carpet of Snow	1 oz. 1.15
Aster Ball Florist Mix	¾ oz. 7.20
Coleus Ball St. Color Mix	¼ oz. 11.00
Dahlia Unwin's Dwf. Mix	1 oz. 2.50
Dianthus Bravo	¼ oz. 5.00
Impatiens Dwf. Mix	¾ oz. 3.00
Marigold Crackerjack	1 oz. 3.00
Marigold Petite Mix	2 ozs. 6.00
Phlox Globe Mix	1 oz. 8.00
Portulaca Double Mix	¼ oz. 1.25
Salvia St. John's Fire	3 ozs. 22.50
Snapdragon Rocket Mix	¼ oz. 19.25
Verbena Ideal Mix	1 oz. 6.00
Zinnia State Fair Mix	2 ozs. 5.50
Zinnia Thumbelina	1 oz. 15.00
CATALOG PRICE	\$117.70
Less 8% Discount	9.42
SWEET 16 COLLECTION F	\$108.28

Our standard discounts under business terms apply to above prices. For example: If you order Collection B at \$57.50, you may deduct an additional 8% cash discount. SAVE EVEN MORE by combining this with your other seed items. If your order totals \$100.00 or more, your cash discount would be 10%.

CATALOG NOTES . . .

GENERAL INDEX

For detailed index, see inside back cover.	Pages
Flower Seeds	2- 76
Vegetable Seeds	77- 82
Plants	83- 96
Bulbs	97-103
Garden Mums	104-106
Containers and Supplies	107-128

FLOWER SEEDS

Annual and perennial lists are **combined** in alphabetical order, in each case annuals appear first, then perennials. The latter are marked with the following symbol:

PERENNIAL

ALL-AMERICA SELECTIONS

winners are marked like this: 

SWEET SIXTEEN SELECTIONS

are indicated by this symbol: 

A Line of Cultural Information

. . . appears at the head of the listing of each genus of flower seed. Example:

ALSTROEMERIA (Lily-of-Peru)

PERENNIAL	(A. chilensis)	1600 S.	6-8 weeks	55°
Genus and species as described by the best available botanical reference.	Number of seeds per ounce	Usual time required for germination.	Recommended normal night temperature for best germination	

In cases where the number of seeds per ounce varies by variety, you will find "S. See below" in the space normally occupied by the number of seeds, and that figure will be given for each variety listed. These figures must NOT be accepted as indicating the number of plants to be expected. Under favorable germinating conditions most large seeds will germinate 60% to 70%. In figuring your seed requirements, keep in mind that it is also good practice to select only the most vigorous seedlings, except in the case of mixtures, when seedlings should be transplanted "as they come."

General Flower Seed List



ACHILLEA

PERENNIAL (A. species) S. See below 1-2 weeks 65-75°

- **Filipendula, Parker's Variety** (Cloth of Gold). 225,000 S. 4 ft. Large heads of golden yellow flowers on long stems; fine for cutting.

- **The Pearl** (Ptarmica). 170,000 S. 2½ ft. The standard double white for cutting.

Prices above 2, each: tr. pkt. (⅓ oz.), 35c; ⅛ oz., 85c; ¼ oz., \$1.50; 1 oz., \$4.50; 4 ozs., \$13.50.

ACHIMENES

ANNUAL (A. species) 2,000,000 S. 2-3 weeks 65-75°

Mixture. 18 in. Brilliantly colored, trumpet-like flowers in velvety tones of red, violet and white. Makes a nice spring and summer pot plant. Culture same as Gloxinias. Tr. pkt. (1000 or more seeds), \$2.00.

ACONITUM (Monkshood)

PERENNIAL (A. Napellus) 10,000 S.

Must be exposed to freezing temperature for normal germination.

Napellus. 4 ft. Dark blue; does best in partial shade.

Tr. pkt. (⅓ oz.), 40c; ¼ oz., \$1.20; 1 oz., \$3.60; 4 ozs., \$10.65.

AGERATUM

ANNUAL (A. mexicanum) 200,000 S. 3 weeks 65-75°

SOW Feb.-Mar.	SPACE 6-9 in.	FLOWER July to frost.
-------------------------	-------------------------	---------------------------------

This popular bedding plant with its attractive powder blue flowers is a native of tropical America, and is sometimes called Floss Flower. Culture is simple; in germinating, cover seed lightly, or not at all. After seedlings are transplanted to Paks, pots or flats they'll do best in a 60° temperature. For late late fall and winter greenhouse pot plants, sow in September.



AGERATUM BLUE MINK

- **Blue Mink.** A Sweet Sixteen Selection for 1963. 12 in. Tetraploid. Large, powder-blue flowers are liberally borne on shapely plants. Early blooming and much more uniform than other varieties from seed. Pictured above. Tr. pkt. (⅓ oz.), 50c; ⅛ oz., \$1.35; ¼ oz., \$2.25; 1 oz., \$6.75; 4 ozs., \$20.00.

AGERATUM (Cont'd)

- **Blue Bedder.** 12 in. Fairly uniform in growth and color with medium large, freely produced, bright blue flowers. Tr. pkt. (⅓ oz.), 35c; ⅛ oz., 90c; ¼ oz., \$1.75; 1 oz., \$5.00; 4 ozs., \$15.00.

- **Blue Cap.** 6-8 in. Small, bright orchid-blue flowers freely produced on bushy plants. The most dwarf blue Ageratum. Tr. pkt. (⅓ oz.), 30c; ¼ oz., \$1.40; 1 oz., \$4.00; 4 ozs., \$12.00.

Fairy Pink. 12 in. Shades of lavender-pink. Tr. pkt. (⅓ oz.), 45c; ⅛ oz., \$1.20; ¼ oz., \$2.25; 1 oz., \$6.50.

Golden Ageratum (Lonas inodora). 128,000 S. 14 in. Large clusters of Ageratum-like golden yellow flowers. Very colorful for bedding or borders. Tr. pkt. (⅓ oz.), 50c; ⅛ oz., 80c; ¼ oz., \$1.50; 1 oz., \$2.75.

Imperial Dwarf White. 12 to 15 in. Medium dwarf, silvery white. Tr. pkt. (⅓ oz.), 30c; ¼ oz., \$1.40; 1 oz., \$4.00.

Midget Blue. 12 in. Medium sized, clear blue flowers are freely carried on dense, small-leaved plants. Tr. pkt. (⅓ oz.), 45c; ⅛ oz., \$1.20; ¼ oz., \$2.25; 1 oz., \$6.50; 4 ozs., \$19.50.

ALOE

ANNUAL (A. species) 6500 S. 3-4 weeks 65-75°

Variegata (Tiger Aloe). 2 inch pot plants of this attractive green and yellow foliage plant can be produced in less than a year. A valuable item for florists.

100 seeds, \$1.65; 500 seeds, \$7.00; 1000 seeds, \$12.00.

See Cactus, page 15.

ALSTROEMERIA (Lily-of-Peru)

PERENNIAL (A. chilensis) 1600 S. 6-8 weeks 55°

Chilensis. 3 ft. shades of pink, rose and red. Medium tall. For bedding and cut flower use. Germination erratic.

Tr. pkt. (⅓ oz.), 55c; ¼ oz., \$1.65; 1 oz., \$5.00.

ALYSSUM

ANNUAL (Lobularia maritima) 90,000 S. 2 weeks 65-75°

SOW Mar.-Apr.	SPACE 6-8 in.	FLOWER June to frost
-------------------------	-------------------------	--------------------------------

The Mediterranean region of southern Europe was the original home of Sweet Alyssum which is also occasionally called Madwort. This is one of the easiest-to-grow of all bedding plants except for its susceptibility to damp-off which must be guarded against. Seed may be sown in flats and transplanted, although most growers today sow a few seeds directly in Paks or pots in "hills" without bothering to thin the seedlings.

Little Gem. 5 in. Dense, rounded heads of white flowers; does not spread. ¼ oz., 45c; 1 oz., \$1.25; 4 ozs., \$3.75.

Pink Heather. 6 in. A dwarf, compact, Gem type Alyssum well covered with lavender-pink flowers. Pictured next page. Tr. pkt. (⅓ oz.), 55c; ¼ oz., \$1.65; 1 oz., \$4.95.

Rosie O'Day ALL-AMERICA SELECTION 1961. A lavender-rose, similar in color to Pink Heather but low and spreading in habit. About 4 inches high and 10 inches across. Tr. pkt. (⅓ oz.), 85c; ¼ oz., \$2.50; 1 oz., \$7.50.

- **Royal Carpet.** 118,000 S. Violet-purple flowers are freely produced on plants about four inches high and ten inches across. Makes a nice border plant. Pictured next page. Tr. pkt. (⅓ oz.), 40c; ¼ oz., \$1.00; 1 oz., \$2.70; 4 ozs., \$8.00.

Violet King. 4 in. Dwarf plants, deeper in color and more compact than Violet Queen.

Tr. pkt. (⅓ oz.), 45c; ¼ oz., \$1.50; 1 oz., \$4.50; 4 ozs., \$15.00.

Violet Queen. Recommend Violet King.

ALYSSUM CONTINUED NEXT PAGE

ALYSSUM (Cont'd) **Offer all three — purple, white and pink.**



ALYSSUM ROYAL CARPET



ALYSSUM CARPET OF SNOW (A Sweet Sixteen Selection)



ALYSSUM PINK HEATHER



**SWEET
SIXTEEN**

• **CARPET OF SNOW**

A Sweet Sixteen Selection for 1963. Produces a very dense, flat mass of white flowers 3 to 4 inches high by 8 to 10 inches across. A very popular and useful bedding plant. Pictured above.
Tr. pkt. (1/8 oz.), **40c**; 1 oz., **\$1.15**; 4 ozs., **\$3.35**; 1 lb., **\$10.00**.

PERENNIAL (A. saxatile) 30,000 S. 3-4 weeks 65-75°

The three varieties following are perfectly hardy with us and make fine, free flowering rock garden or border plants.

Mountain Gold. Clear, golden-yellow, a companion to Creeping Phlox, blooms early spring from a summer sowing.

Tr. pkt. (1/8 oz.), **60c**; 1/4 oz., **\$1.80**; 1 oz., **\$5.40**.

• **Saxatile Compactum** (Gold Dust). 12 in. Flowers early May. Rich golden yellow.

Tr. pkt. (1/4 oz.), **40c**; 1/2 oz., **65c**; 1 oz., **\$1.20**; 4 ozs., **\$3.60**.

Saxatile Silver Queen (Sulphureum). 12 in. Light lemon-yellow. Tr. pkt. (1/8 oz.), **40c**; 1/4 oz., **\$1.20**; 1 oz., **\$3.60**.

AMARANTHUS

ANNUAL (A. Tricolor) S. See below 2-3 weeks 65-75°

Planted outdoors, Amaranthus prefer dry, sunny locations. Water sparingly, if at all, after plants are established.

Molten Fire. 28,000 S. 4 ft. Variegated deep red foliage.

Tricolor Splendens (Joseph's Coat). 60,000 S. 3 ft. Beautiful foliage. Green, red and yellow.

Prices above 2, each: Tr. pkt. (1/8 oz.), **25c**; 1/4 oz., **70c**; 1 oz., **\$2.10**; 4 ozs., **\$6.00**.

ANCHUSA

PERENNIAL (A. Species). S. See below 3-4 weeks 65-75°

Seed should be refrigerated for 72 hours before sowing.

Dropmore Strain (Italica). 1100 S. 5 ft. Nice blue for cutting. Tr. pkt. (1/8 oz.), **40c**; 1/4 oz., **75c**; 1 oz., **\$2.25**; 4 ozs., **\$6.50**; 1 lb., **\$19.00**.

Myosotidiflora. 10,500 S. 12 in. May flowering. Forget-me-not-blue. Tr. pkt. (1/8 oz.), **45c**; 1/4 oz., **\$1.35**; 1/2 oz., **\$2.50**; 1 oz., **\$7.50**.

ANEMONE

PERENNIAL (A. Species) 37,000 S. 5-6 weeks 65-75°

Pulsatilla (European Pasque Flower), 12 in. Beautiful violet-purple flowers on plants which are covered with silky hairs. Blooms in April-May; likes a dry location. Tr. pkt. (1/8 oz.), **65c**; 1/4 oz., **\$1.90**; 1 oz., **\$5.65**.

The dot (•) indicates varieties most dependably satisfactory in our experience and observation.

ANTHEMIS

PERENNIAL (A. Kelwayi) S. See below 3-4 weeks 65-75°

Kelwayi (Hardy Marguerite). 85,000 S. 3 ft. Yellow Daisy flowers produced throughout the summer. 1/4 oz., **35c**; 1 oz., **\$1.10**.

St. Johannis. 45,000 S. 1 1/2 in., bright orange flowers on 9 to 12 inch stems. Especially good for cutting.

Tr. pkt. (1/8 oz.), **35c**; 1/4 oz., **\$1.00**; 1 oz., **\$3.00**.

AQUILEGIA (Columbine)

PERENNIAL (A. Species) 15,500 S. 3-4 weeks 65-75°

SOW SPACE FLOWER
Jan.-Feb. 12-18 in. May thru summer

Columbines, as Aquilegias are usually called, are natives of Europe, and one of the most satisfactory of all garden perennials. They will sell readily if offered along with bedding annuals, and for this purpose, should be handled in Paks or Jiffy-Pots. Plants started in late winter will bloom a year from the following summer. Seeds sometimes germinate irregularly.



Coerulea (Rocky Mountain Columbine). 18 in. Sky-blue with white corolla.

Tr. pkt. (1/8 oz.), **50c**; 1/4 oz., **85c**; 1/2 oz., **\$1.50**; 1 oz., **\$4.50**; 4 ozs., **\$12.00**.

Crimson Star. 18 in. Dark red with white corolla.

Tr. pkt. (1/8 oz.), **90c**; 1/4 oz., **\$1.75**; 1/2 oz., **\$3.00**; 1 oz., **\$9.00**.

AQUILEGIA (Cont'd)

- **Long-Spurred Mixture.** 2 ft. A well balanced blend with large flowers and long spurs.
Tr. pkt. ($\frac{1}{8}$ oz.), **75c**; $\frac{1}{4}$ oz., **\$1.30**; $\frac{1}{2}$ oz., **\$2.40**; 1 oz., **\$7.00**.
- **McKana's Giant.** 2½ ft. Large, extra long-spurred flowers 3 to 4 inches across in a gay mixture of colors. One of the showiest of all Columbines. Tr. pkt. ($\frac{1}{8}$ oz.), **90c**; $\frac{1}{4}$ oz., **\$1.75**; $\frac{1}{2}$ oz., **\$3.00**; 1 oz., **\$9.00**; 4 ozs., **\$27.00**.
- **Mrs. Nicholls.** 2 ft. Large-flowered, clear deep blue.
Tr. pkt. ($\frac{1}{8}$ oz.), **90c**; $\frac{1}{4}$ oz., **\$1.75**; $\frac{1}{2}$ oz., **\$3.00**; 1 oz., **\$9.00**.
- **Mrs. Scott Elliott's Mixture.** 2 ft. An excellent long-spurred mixture. Tr. pkt. ($\frac{1}{8}$ oz.), **50c**; $\frac{1}{4}$ oz., **85c**; $\frac{1}{2}$ oz., **\$1.50**; 1 oz., **\$4.50**; 4 ozs., **\$13.50**.
- **Rose Queen.** 18 in. Rose with white corolla.
Tr. pkt. ($\frac{1}{8}$ oz.), **50c**; $\frac{1}{4}$ oz., **85c**; $\frac{1}{2}$ oz., **\$1.50**; 1 oz., **\$4.50**.
- **Snow Queen.** 2 ft. Creamy white flowers.
Tr. pkt. ($\frac{1}{8}$ oz.), **50c**; $\frac{1}{4}$ oz., **85c**; $\frac{1}{2}$ oz., **\$1.50**; 1 oz., **\$4.50**.

ARABIS (Rock Cress)

PERENNIAL (A. species) 120,000 S. 3-4 weeks 65-75°

- **Alpina Pink.** 12 in. Delicate pale pink.
Tr. pkt., **45c**; $\frac{1}{4}$ oz., **\$1.30**; 1 oz., **\$3.90**.
- **Alpina Snowcap.** 6 in. Dwarf, compact plants with dense masses of shining snow-white flowers. Blooms very early in spring. Tr. pkt., **40c**; $\frac{1}{4}$ oz., **80c**; 1 oz., **\$2.75**.

ARMERIA (Thrift)

PERENNIAL (A. species) S. See below 3-4 weeks 65-70°

- **Alpina.** 16,500 S. 8 in. Dwarf, bright rose. Seed carefully hand cleaned for better germination. Tr. pkt. ($\frac{1}{32}$ oz.), **\$2.60**; $\frac{1}{8}$ oz., **\$4.00**; $\frac{1}{4}$ oz., **\$7.20**; $\frac{1}{2}$ oz., **\$12.00**.
- **Glory of Holland.** 12,000 S. Ball-shaped deep pink flowers about 1½ inches in diameter, carried on straight, wiry stems 2 feet long. Fine for cutting. Blooms throughout the summer.
Tr. pkt. ($\frac{1}{32}$ oz.), **75c**; $\frac{1}{8}$ oz., **\$2.20**; $\frac{1}{4}$ oz., **\$4.25**; 1 oz., **\$12.50**.

ASCLEPIAS

PERENNIAL (A. tuberosa) 4500 S. 3-4 weeks 65-70°

Tuberosa. 3 ft. Showy, orange flowers. Requires well drained location. Freezing over winter helps germination.
Tr. pkt. ($\frac{1}{8}$ oz.), **55c**; $\frac{1}{4}$ oz., **\$1.50**; 1 oz., **\$4.50**.

ASPARAGUS

ANNUAL (A. species) 4-6 weeks 70-80°

SOW

Late winter-spring
Both Plumosus and Sprengeri have been used for years in hanging baskets, window boxes and for cut greens. They're natives of Africa and grow best in a 60° house. Seeds are slow to germinate and, after becoming established, will benefit from a feed of ammonium sulfate at the rate of 1 oz. to 2 gal. of water every two weeks during the summer. Partial shade is helpful at that time, too.



Plumosus. 100 seeds, **50c**; 250 seeds, **\$1.10**; 1000 seeds, **\$3.15**; 5000 seeds, **\$11.00**; 10,000 seeds, **\$20.00**.

Sprengeri. 100 seeds, **40c**; 250 seeds, **95c**; 1000 seeds, **\$2.75**; 5000 seeds, **\$8.50**; 10,000 seeds, **\$15.00**.

Asparagus Falcatus, see page 27.

The dot (•) indicates varieties most dependably satisfactory in our experience and observation.

GREENHOUSE AND OUTDOOR ASTERS



Picture at left shows Vic Ball and Phil Jones looking over the Aster flowering trials at West Chicago. Extensive trials such as this are flowered in our greenhouse each year to insure that the seed you buy is true to type and of the top quality for which Geo. J. Ball, Inc. is justly famous.

GREENHOUSE ASTERS

We've had a lot of growers tell us that their spring greenhouse Aster crops were the best paying crops that they had on their place. While Asters can be flowered any month of the year, the spring and early summer months seem to be the most profitable. The only important requirements are: 60° night temperatures, and additional lighting, which must be supplied continuously from the seedling stage until plants are 20 to 24 inches tall. The only exception is the period from May 5 to August 20, during which day length is long enough. 60 watt bulbs with reflectors, spaced 5 feet apart, or the lighting set-up you use for Mums is satisfactory. Light must be turned on from sundown to 10:00 P.M. daily, or for four hours in the middle of the night.

Spacing is usually 8 x 8 inches. White Ball, Pink Ball and Rose Ball are especially desirable for off-season culture. Azure Ball and Purple Ball do equally well, but these colors will be wanted in lesser quantity. Use sterilized soil for best results.

The schedule below works out satisfactorily in most areas, although there is more variation from year to year than with Mums.

OUTDOOR ASTERS

"Resistance" to Aster wilt does not mean complete "immunity"! Even the most resistant strains may eventually wilt in thoroughly infested soil, although they are far more satisfactory than non-resistant strains. Our past experience indicates that changing the location of the Aster planting regularly, or steam sterilizing, is a worth-while safety precaution. Pano-drench has proven particularly helpful in overcoming damp-off. We sow seeds 6 weeks before planting-out date. Three weeks after sowing, the seedlings go into Jiffy-Pots or plant bands; three weeks later they're ready for planting out or benching. We space them a foot apart each way in beds. Cloth house protection or frequent D.D.T. spraying is necessary to control the leaf hoppers which carry the "yellows" disease.

Sow	Flower	Sow	Flower	Sow	Flower	Sow	Flower
July 15	Jan.	Oct. 20	April	Mar. 15	July	June 10	Oct.
Aug. 15	Feb.	Dec. 20	May	Apr. 20	Aug.	June 20	Nov.
Sept. 10	March	Feb. 1	June	May 20	Sept.	July 10	Dec.

Asters

BALL ASTERS

(Wilt Resistant)

ANNUAL (*Callistephus chinensis*)

12,000 S. 2-3 weeks 65-75°

Many growers are regularly producing good quality Asters from February to November in northern greenhouses, and throughout the winter in southern areas, both under glass and outdoors. Asters require only additional lights, steam sterilized soil, and 55-60° temperature during off-normal seasons to grow them to perfection — and they'll hold up in the display case or home nearly as long as Mums, an important point. One thing is essential, though: a strain bred especially for florists' use. The Ball Aster is the result of over 15 years of intensive breeding, and fills this requirement perfectly. For bedding plant sales in Paks or Jiffies, sow about 6 weeks before selling season.



To maintain the full doubleness and high quality of these varieties calls for annual production of specially selected planting stock. Without this constant yearly program, these strains will rapidly revert to the old open-centered types. That's why it's important to buy originator's seed, identified by the symbol at left above. All other is at least 2 generations removed from the originator's controlled line-breeding. All the following varieties are Ball Originator Seed.

NOTE: Because of their extreme doubleness the true originator's strains of these Asters are shy seeders and are sometimes in short supply. Order early and be sure of your supply.

See cultural instructions on page 9.



ASTER BALL FLORIST MIXTURE



BALL ASTERS

- **White Ball.** Large flowers (3½ to 4 in.), exceptional doubleness, and fine, stiff stems. Blooms normally August 25.
- **Rose Ball.** Rich, deep rose with fully double (3½ to 4 in.), incurved flowers. Blooms normally August 25.
- **Purple Ball.** Large incurved flowers (3½ to 4 in.), of bright purple. Blooms normally August 20.
- **Pink Ball.** Large (3½ to 4 in.), fully double shell-pink flowers. Blooms normally August 20.
- **Azure Ball.** Fully double (3 to 3½ in.), flowers of clear light blue. Blooms normally August 20.
- **Phlox Ball.** Fully double, medium large flowers (3 to 3½ in.), of soft peach-blossom pink. Blooms normally September 1.
- **Red Ball.** Approaches Ball type quality in Heart of France color.

Ball Florist Mixture. A Sweet Sixteen Selection for 1963. Formula blend of all the foregoing extra double Ball type Asters. Excellent for bedding or cutting. Pictured above.

Pink Lady. Between Rose and Pink Ball in tone. A very high quality, fully double Aster with wide, incurved petals. Blooms normally September 1.

Prices above 9, each: tr. pkt. (1000 seeds), \$1.75; ¼ oz., \$3.20; 1 oz., \$9.60; 4 ozs., \$29.00.

COLLECTION: 1 tr. pkt. each of preceding named varieties, (including Pink Lady), 8 pkts., \$12.60.

ROYAL

Bloom normally just ahead of the American Branching class. August 15-20.

Azure-Blue

Deep Purple

Shell-Pink

Deep Rose

White

Royal Mixture

Prices above 6, each: tr. pkt. (⅓ oz.), 35c; ¼ oz., 65c; 1 oz., \$2.00; 4 ozs., \$7.00; 1 lb., \$21.00.

EARLIANA ASTERS

This is a class of Aster which is gaining favor with cut flower growers. For normal season blooming, from an early May sowing they will flower along with the Queen of the Market class in early August. An early to mid-March sowing, benched at a 6 x 6 inch spacing, lighted until May first, will be ready to cut from early to mid-June. This means fine quality Asters in about 90 days from seed sowing. The class is not quite as vigorous in habit and averages about 4 breaks per plant, hence the closer spacing.

Earliana White. Large 3 to 3½ inch, fully double flowers.

Earliana Blue. A deep true blue color; large 3 to 3½ inch flowers of excellent doubleness.

Prices above 3, each: tr. pkt. (1000 seeds), \$1.75; ¼ oz., \$3.20; 1 oz., \$9.60; 4 ozs., \$29.00.

COLOSSAL

- **Peacock White.** The large, sparkling white flowers often measure up to 5 inches across, with lacy tubular petals. Completely different from any other Aster, this exquisite flower resembles a spider type Mum. Ball Orig. Seed.
Tr. pkt. (⅓ oz.), \$1.75; ¼ oz., \$3.20; 1 oz., \$9.60.

Yellow Duchess. A pure yellow with large incurved flowers.
Tr. pkt., \$1.00; ¼ oz., \$3.00; 1 oz., \$9.00.

KING or NEEDLE (Non-Resistant)

Attractively quilled petals give these flowers hardness and durability for shipping. Blooms normally late August.

Lavender **Rose** **Salmon** **Shell-Pink**

Violet **White** **King Mixture**

Prices above 7, each: tr. pkt. (⅓ oz.), 50c; ¼ oz., \$1.50; 1 oz., \$4.50; 4 ozs., \$13.50; 1 lb., \$40.00.

AMERICAN BRANCHING (Early Beauty)

The standard long-stemmed, midseason class, flowering normally in late August.

Heart of France. Distinctive scarlet-crimson.

Tr. pkt. ($\frac{1}{8}$ oz.), **40c**; $\frac{1}{4}$ oz., **\$1.25**; 1 oz., **\$3.75**; 4 ozs., **\$12.50**.

Azure Blue Deep Rose Purple

Simple Pink White

American Branching Mixture.

Prices above 6, each: tr. pkt. ($\frac{1}{8}$ oz.), **35c**; $\frac{1}{4}$ oz., **65c**; 1 oz., **\$2.00**; 4 ozs., **\$7.00**; 1 lb., **\$21.00**.

- **Scarlet Pimpernel.** Glowing copper-scarlet. A striking color with large Anemone type flowers on strong stems. Just right for those who want something a bit different. Late Aug.

Tr. pkt. ($\frac{1}{8}$ oz.), **45c**; $\frac{1}{4}$ oz., **\$1.25**; 1 oz., **\$3.50**.

SHAGGY

This includes the Early California Giants, blooming late Aug. and the Cregos, blooming early Sept. Both have interlaced petals, producing a fluffy effect.

- **Early Giant Light Blue**

Early Giant White

Early Giant Peach Blossom

Early Giants Mixture

- **Early Giant Rose Marie.** Deep rose.

Prices above 5, each: tr. pkt. ($\frac{1}{8}$ oz.), **50c**; $\frac{1}{4}$ oz., **\$1.40**; 1 oz., **\$4.15**; 4 ozs., **\$12.50**.

Crego Azure-Blue

Crego Purple

Crego White

Crego Deep Rose

Crego Shell-Pink

Crego Mixture

Prices above 6, each: tr. pkt. ($\frac{1}{8}$ oz.), **35c**; $\frac{1}{4}$ oz., **65c**; 1 oz., **\$2.00**; 4 ozs., **\$6.00**; 1 lb., **\$18.00**.

BOUQUET

A class of upright branching wilt-resistant Asters developed for the cut-flower market. 24 inch plants carry 3-3½ inch, fully double flowers at the top to be cut as one bunch. Blooms normally mid-August.

White

Scarlet

Purple

Azure-Blue

Crimson

Rose-Pink

Prices above 6, each: tr. pkt. ($\frac{1}{8}$ oz.), **75c**; $\frac{1}{4}$ oz., **\$2.10**; 1 oz., **\$6.25**; 4 ozs., **\$18.75**.

- **Powderpuff Mixture.** A showy blend of the above and other colors in this class.

Tr. pkt. ($\frac{1}{8}$ oz.), **50c**; $\frac{1}{4}$ oz., **\$1.50**; 1 oz., **\$4.50**; 4 ozs., **\$14.00**; 1 lb., **\$42.00**.

DWARF ASTERS

- **DWARF ALL SAINTS**

Rose

Dark Blue

Light Blue

Scarlet

Salmon-Pink

White

Mixture

Prices above 7, each: tr. pkt. ($\frac{1}{8}$ oz.), **75c**; $\frac{1}{4}$ oz., **\$2.00**; 1 oz., **\$6.00**.

- **DWARF QUEEN**

Mixture of all Colors. Intermediate in habit between the Dwarf All Saints and the Kirkwells.

Tr. pkt. ($\frac{1}{8}$ oz.), **50c**; $\frac{1}{4}$ oz., **\$1.50**; 1 oz., **\$4.50**.

- **KIRKWELL**

Mixture. Somewhat taller than Dwarf Queens or Dwarf All Saints. Tr. pkt. ($\frac{1}{8}$ oz.), **75c**; $\frac{1}{4}$ oz., **\$2.00**; 1 oz., **\$6.00**.

PERENNIAL ASTERS

PERENNIAL (A species) S. See below. 2-3 weeks 70-80°

Alpinus, Finest Mixture. 18,000 S. 15 in. 1½ in. lavender, blue, and white flowers.

Tr. pkt. ($\frac{1}{8}$ oz.), **55c**; $\frac{1}{8}$ oz., **\$1.10**; $\frac{1}{4}$ oz., **\$2.00**.

SINGLE

Single Rainbow Mixture. An attractive mixture. Medium sized, Bouquet type.

Tr. pkt. ($\frac{1}{8}$ oz.), **30c**; $\frac{1}{4}$ oz., **60c**; 1 oz., **\$1.75**; 4 ozs., **\$5.25**; 1 lb., **\$15.50**.

Trombetta. An excellent mixture of large-flowered single Asters for cut-flower use.

Tr. pkt. ($\frac{1}{8}$ oz.), **65c**; $\frac{1}{4}$ oz., **\$1.75**; 1 oz., **\$5.00**; 4 ozs., **\$15.00**.

SPECIAL MIXTURES

All Purpose Mixture. A formula blend of the leading, all double and single cut flower varieties and types for those who want the most in colors and blooms over a long period. Primarily for mixed bedding sales. Tr. pkt. ($\frac{1}{8}$ oz.), **35c**; $\frac{1}{4}$ oz., **85c**; 1 oz., **\$2.50**; 4 ozs., **\$7.50**; 1 lb., **\$22.00**.

Early Charm Mixture. A complete color mixture of extremely early flowering Queen of the Market type. About 18 inches tall; flowers about 3 inches. Fine for cutting, as well as bedding. Tr. pkt. ($\frac{1}{8}$ oz.), **50c**; $\frac{1}{4}$ oz., **\$1.50**; 1 oz., **\$4.50**; 4 ozs., **\$13.50**.

Princess Mixture. A formula blend of medium sized flowers having crested or cushioned Anemone centers. Normal blooming late Aug. Tr. pkt. ($\frac{1}{8}$ oz.), **50c**; $\frac{1}{4}$ oz., **\$1.45**; 1 oz., **\$4.25**; 4 ozs., **\$12.75**.

Queen of the Market Mixture. A blend of all colors in this early August, rather short-stemmed class. Partially resistant. Tr. pkt. ($\frac{1}{8}$ oz.), **35c**; $\frac{1}{4}$ oz., **75c**; 1 oz., **\$2.15**; 4 ozs., **\$6.50**; 1 lb., **\$19.00**.

Burpeeana (Non-Resistant). Extra early bedding Crego Mixture. Base branching. Late July. Originator's seed. Tr. pkt. ($\frac{1}{8}$ oz.), **70c**; $\frac{1}{4}$ oz., **\$2.10**; 1 oz., **\$6.30**; 4 ozs., **\$19.00**.

California Super Giant Mixture (Non-Resistant). Choice blend of large, fully double, "shaggy-petaled" flowers. Long-stemmed. Late Sept. Tr. pkt. ($\frac{1}{8}$ oz.), **65c**; $\frac{1}{4}$ oz., **\$1.85**; 1 oz., **\$5.50**; 4 ozs., **\$16.50**.

Giant California Sunshine Mixture (Non-Resistant). Attractive large flowered Anemone type; blooms early Sept. Small center cushions and long ray petals.

Tr. pkt. ($\frac{1}{8}$ oz.), **45c**; $\frac{1}{4}$ oz., **\$1.25**; 1 oz., **\$3.75**.



Hardy Large-Flowered Mixture. 50,000 S. 4 ft. Fall flowering. A perfectly hardy and attractive assortment. The best strain available. Tr. pkt. ($\frac{1}{8}$ oz.), **55c**; $\frac{1}{8}$ oz., **\$1.65**; $\frac{1}{4}$ oz., **\$3.00**.

- **Wartburg Star (Subcoeruleus).** 20,000 S. Clear lavender-blue flower with yellow center. For border or cut flowers. Tr. pkt. ($\frac{1}{8}$ oz.), **65c**; $\frac{1}{8}$ oz., **\$1.10**; $\frac{1}{4}$ oz., **\$2.00**.

The dot (•) indicates varieties most dependably satisfactory in our experience and observation.

AUBRIETIA

PERENNIAL (A. deltoidea graeca) 150,000 S. 2-3 weeks 65-75°

Large-Flowered Mixture (Monarch Strain). 6 in. Low growing, mat-like plants; similar to Arabis but with flowers in a wide range of colors from lilac to purple.

Hendersoni. Deep purple.

Prices above 2, each: tr. pkt., **45c**; ¼ oz., **\$1.30**; 1 oz., **\$3.90**.

Baby's Breath. See Gypsophila, page 29.

Bachelor Button. See Centaurea, page 18.

BALSAM

ANNUAL (Impatiens balsamina) 3300 S. 2-3 weeks 65-75°



BALSAM COLOR PARADE. A bright colorful mixture.

SOW Mar.-Apr.	SPACE 8-12 in.	FLOWER July to Oct.
-------------------------	--------------------------	-------------------------------

Balsams are natives of sub-tropical India, Malaya and China, and therefore require a warm, sunny location. They will not tolerate wet or cold weather. They're becoming more popular as bedding plants and are easily handled in Paks or pots. Balsams belong to the same genus as Impatiens, and can be sown and handled in the greenhouse in the same manner.

DWARF BUSH PARADE

10 in. More dwarf and compact than the regular Bush Balsams, with large double flowers well displayed above the foliage.

Pink	Purple	Rose	Scarlet	White
-------------	---------------	-------------	----------------	--------------

Prices above 5 each: tr. pkt. (⅓ oz.), **\$1.15**; ¼ oz., **\$2.10**; 1 oz., **\$6.25**.

- **Color Parade Mixture.** Formula mixture, pictured above. Tr. pkt. (⅓ oz.), **\$1.00**; ¼ oz., **\$1.80**; 1 oz., **\$5.40**; 4 ozs., **\$16.20**.

DOUBLE BUSH

15 in. Bright, showy, double flowers on bushy plants.

Scarlet	Mixture
----------------	----------------

Prices above 2, each: Tr. pkt. (⅓ oz.), **45c**; ¼ oz., **85c**; 1 oz., **\$2.50**; 4 ozs., **\$7.50**; 1 lb., **\$22.50**.

Double Camellia-Flowered Mixture. 2 ft. Bright colors. Tr. pkt. (¼ oz.), **35c**; 1 oz., **\$1.00**.

BAPTISIA (False Indigo)

PERENNIAL (B. australis) 1700 S. 3-4 weeks 65-75°

Australis. 3 ft. Sprays of Pea-shaped, indigo-blue flowers. Tr. pkt. (⅓ oz.), **50c**; ¼ oz., **80c**; 1 oz., **\$2.35**.

BASIL

ANNUAL 20,000 S. 1 week 70-80°



Dark Opal. ALL-AMERICA SELECTION 1962. 15 in. An All-America Selection award winner for 1962. Very attractive, dark purplish bronze foliage. Small lavender-white flowers on slender spikes make a striking contrast to the foliage. Interesting and decorative as a foliage plant, besides its natural use as an herb. Tr. pkt. (⅓ oz.), **\$1.00**; ¼ oz., **\$3.15**; 1 oz., **\$9.35**; 4 ozs., **\$31.20**.

BELLIS (English Daisy)

PERENNIAL (B. perennis var. monstrosa) 135,000 S. 1-2 weeks 65-75°

SOW Aug.	SPACE 6 in.	FLOWER Spring & Fall.
--------------------	-----------------------	---------------------------------

Here's another native European plant that is adapted to the cool, moist conditions that prevail in England and the northern portions of Europe. They are best handled in the same manner as Pansies and will provide a nice bedding display until hot summer weather arrives. They should be protected in winter, and will require plenty of water during the summer.



Red	Rose	White	Salmon	Mixture
------------	-------------	--------------	---------------	----------------

Prices above 5, each: tr. pkt. (⅓ oz.), **50c**; ¼ oz., **\$2.00**; 1 oz., **\$3.75**; 1 lb., **\$11.00**.

You will supply your customers better bedding plants if you sell them plants not in bloom. If you follow this practice for quality plants, use Plastic Picture Labels or Jumbo Cards in paks and flats so they can see the finished product.

BALL RED BOOK

Tenth Edition

Cultural information on over 120 miscellaneous crops, with special emphasis on bedding plants, Mums, Snaps.

Includes chapters on various phases of greenhouse management — soil sterilizing, seed germination, greenhouse cooling, plastic greenhouses, etc.

\$2.00, net, postpaid.



Begonias

Fibrous Rooted



BALL DEEP ROSE

Begonias are being used increasingly as bedding plants, even in full sun — and for partially shaded areas, they are ideal.

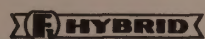


CINDERELLA WHITE

Remarkable for the attractive, large golden yellow centers. Also available in rose and a mixture, they sell on sight.

ANNUAL (B. semperflorens)

No pot plant grower can afford to be without Begonias. Better varieties, including the new F₁ Hybrids, are playing their part in keeping this versatile plant close to the top of the list of seed grown pot plants. Begonias are equally "at home" in 5 inch pots, as less expensive plants in 3 or 4 inch pots, and in combinations of all sorts. In addition, the stronger growing varieties, especially the F₁ Hybrids, make good bedding plants even in full sun — and for partially shaded spots they are ideal.



CINDERELLA STRAIN

Cinderella Rose (A Ball origination). A remarkable new type of Fibrous Rooted Begonia bearing bright rose-pink flowers each with a large, attractive, **golden yellow center**. Height 8-10 in. This type has been available before now only from cuttings. About half the plants are as described, the balance being perfectly salable regular type Begonias.

Cinderella White (A Ball origination). Identical to Cinderella Rose except for its glistening white flowers with contrasting bright gold centers. Pictured above, right.

Cinderella Mixture (A Ball origination). The above two colors plus shades of lighter pink are included in this showy blend.

Prices above 3, each: ½ tr. pkt. (1000 S.), **\$1.25**; tr. pkt. (2000 S.), **\$2.35**; 1/128 oz., **\$7.00**; ⅓ oz., **\$21.00**.

REGULAR BEGONIAS

DWARF (4 to 6 Inches)

- **Adeline**. Very free flowering bright pink; dwarf and compact.
- **Ball Deep Rose**. In winter the color is a deep rosy red which gradually fades to a luminous pink during warm weather. Ball Orig. Seed.
- **Ball Red**. Medium large flowers of bright true scarlet are freely produced on fairly dwarf plants. Ball Orig. Seed.
- **Ball White**. Rather small flowers but very freely produced. Ball Orig. Seed.

About 2,000,000 2-3 weeks 65-75°

Culture: Use a light, well drained material for germination; no soil covering over the seed. Keep surface of flat uniformly moist. Potting soil must also be light, with plenty of organic matter. They must have 60° to keep them moving — and greenhouse shade in summer. Sow December-January for nice 3 inch plants for May bedding sales and combination work. Sow in July for Christmas and midwinter pot plants.

Trade packets of all inbred Begonias contain 4000 seeds or more.

Flamingo. Bi-colored white with pink edge.

- **Luminosa Compacta**. Dwarf, free flowering scarlet-red.
- **Snowbank**. Large, glistening white flowers are carried on dense growing plants. The best white.
- **Dwarf Mixture**. Our own formula mixture of dwarf varieties.

Prices last 8, each: tr. pkt., **\$1.50**; ¼ oz., **\$3.30**; ⅓ oz., **\$6.00**.

DWARF BRONZE-LEAVED VARIETIES

- **Ball Dwarf Carmen**. Compact habit with rich bronze leaves and light pink flowers. Ball Orig. Seed.
- **Frosty**. Pure white flowers contrasting vividly with rich bronze-colored leaves. Dwarf and compact.
- **Bronze-Leaved Dwarf Mixture**. Dwarf bronze-leaved plants with red, pink and white flowers. A formula blend.
- **Dwarf Indian Maid**. The popular scarlet flowers and bronze foliage of Indian Maid in dwarf and compact form.

Prices above 2, each: Tr. pkt., **\$1.25**; ¼ oz., **\$2.75**; ⅓ oz., **\$5.00**.

INTERMEDIATE (6 to 10 Inches)

- **Carmen**. Bright rose-pink flowers with rich bronze leaves.
- **Indian Maid**. Foliage a deep lustrous bronze with scarlet flowers.

Prices above 2, each: Tr. pkt., **\$1.25**; ¼ oz., **\$2.75**; ⅓ oz., **\$5.00**.

BEGONIAS CONTINUED ON PAGE 14.

INTERMEDIATE BEGONIAS (Cont'd)

- Luminosa.** Popular bright red with green foliage tipped red.
- **Scandinavia Pink.** Very free flowering bright rose-pink.
- **Scandinavia Red.** Bright red flowers.
- Scandinavia White.** A white Scandinavia selection.
- **Sparkler.** Brilliant orange-salmon with creamy white petal base. Ball Orig. Seed.
- White Pearl.** White flowers, green leaves, tinged pink.
- Intermediate Mixture.** Made up of the above separate colors.
- Prices** above 7, each: tr. pkt., **\$1.25**; $\frac{1}{4}$ oz., **\$2.75**; $\frac{1}{2}$ oz., **\$5.00**.

F₁ HYBRID BEGONIAS—FIBROUS ROOTED



F₁ Hybrid Begonias are often used in full sun for bedding in Europe, as shown in this photo taken near Hannover.

Unexcelled for uniformity; their Hybrid vigor makes them better adapted to outdoor bedding use than the older inbred varieties. Trade packets of all F₁ Hybrid Begonias contain 2000 seeds or more.

- **Lucifer.** Brilliant scarlet flowers with deep bronzy foliage. Originator's seed. Tr. pkt., **\$1.50**; 5 tr. pkts., **\$6.75**.
- **Pink Pearl.** Rich pink color and uniformly dwarf, compact growth. Originator's seed. Tr. pkt., **\$1.50**; 5 tr. pkts., **\$6.75**.
- **Pink Profusion.** Freely produced coral-pink flowers; green leaves with red veins. Tr. pkt., **\$1.50**; 5 tr. pkts., **\$6.75**.
- **Red Pearl.** Dwarf. Luminosa red. Originator's seed. Tr. pkt., **\$1.50**; 5 tr. pkts., **\$6.75**.
- Red Wonder.** Extra dwarf and free flowering bright red. Originator's seed. Tr. pkt., **\$2.00**; 5 tr. pkts., **\$9.00**.
- Rose Wonder.** Rose-pink. Originator's seed. Tr. pkt., **\$2.00**; 5 tr. pkts., **\$9.00**.
- **Stuttgart.** Bright pink flowers with rich bronze foliage. Originator's seed. Tr. pkt., **\$1.50**; 5 tr. pkts., **\$6.75**.
- Tausendschon Pink.** Dwarf. Bright pink. Originator's seed. Tr. pkt., **\$2.00**; 5 tr. pkts., **\$9.00**.
- Tausendschon Red.** Clear red. Originator's seed. Tr. pkt., **\$2.00**; 5 tr. pkts., **\$9.00**.
- Tausendschon White.** Pure white. Tr. pkt., **\$2.50**; 5 tr. pkts., **\$11.50**.
- **Bronze Leaved F₁ Hybrid Mixture.** Ball Originator's Seed. Tr. pkt., **\$2.00**; 5 tr. pkts., **\$9.00**.
- **Organdy Mixture.** An excellent mixture of F₁ Hybrids in shades of red, pink and white. Well adapted for outdoor bedding, even in full sun. Tr. pkt., **\$1.50**; 5 tr. pkts., **\$6.75**.

TUBEROUS ROOTED

Superb Camellia-flowered, double strains from one of the world's foremost Tuberous Begonia specialists. Sow Dec.-Feb. for May-June sales. Must have 65-75° for good germination and early stages of growth.

Red	Orange	Salmon	Yellow
Scarlet	Rose	Copper	White

Prices above 8 separate colors, each: $\frac{1}{2}$ tr. pkt., **\$1.75**; tr. pkt., **\$3.00**.

Bertini (Multiflora). Bright red single flowers about 2½ inches across are freely produced on compact, bushy plants. Very showy for pots. $\frac{1}{2}$ tr. pkt., **\$1.75**; tr. pkt., **\$3.00**.

- **Tuberous Rooted Double Mixture.** Camellia-flowered. 90% good doubles. Gorgeous colors. $\frac{1}{2}$ tr. pkt., **\$1.75**; tr. pkt., **\$3.00**.

OTHER BEGONIAS

Pendula Mixture (Lloyd). Pendulous. Double flowers, about 2 inches, in shades of scarlet, rose, salmon and white. Fine for hanging baskets. Tr. pkt., **\$3.00**.

• BELLS OF IRELAND

ANNUAL (Molucella laevis)

4,000 S. 3-5 weeks 50°

SOW	SPACE	FLOWER
January	6-8 in.	Late May

This popular "green-flowered" filler for floral arrangements is a native of Western Asia. Germination is often difficult. For greenhouse culture, one successful grower suggests covering the seed flat about $\frac{1}{2}$ inch, with a layer of sand on top. Place the flat outdoors or in 35-40° storage for 6-8 weeks, keeping moist. Bring into greenhouse and germinate at 65-70°. Grow crop at 50°. Sow later (same procedure) for outdoor crop. 2 ft. stems.



Tr. pkt., ($\frac{1}{8}$ oz.), **40c**; $\frac{1}{4}$ oz., **70c**; 1 oz., **\$2.10**; 4 ozs., **\$6.30**.

BROOM

PERENNIAL (Cytisus var.)

5500 S. 6-8 weeks 70-80°

Choice Mixture. 4 to 5 ft. Vigorous, hardy shrubs producing raceme-like flowers in a range of bright colors. Flowers second season from seed.

Tr. pkt. ($\frac{1}{32}$ oz.), **60c**; $\frac{1}{8}$ oz., **\$1.80**; $\frac{1}{4}$ oz., **\$3.00**.

BROWALLIA

ANNUAL (B. species)

S. See below 2-3 weeks 65-75°

SOW	FLOWER
March	June to Oct.

These plants are moderately tender natives of South America and are valued for their rich blue flowers. They should be carefully hardened off before planting outdoors in June. If they can't be given a warm, sheltered location outdoors, they should be treated as a greenhouse pot plant. For this purpose they are usually finished in 5 inch pots in a mix containing peat and sand. Sow July-Aug. for winter plants.



BROWALLIA (Cont'd)

- **Speciosa Major.** 130,000 S. 1½ inch violet-blue flowers on 10 to 12 inch plants. The standard variety for pots. Tr. pkt. (1/128 oz.), **75c**; ¼ oz., **\$1.20**; ⅛ oz., **\$3.60**; ½ oz., **\$6.60**; ¼ oz., **\$12.00**.

Viscosa Compacta Sapphire. 340,000 S. Compact growth with a profusion of small light-eyed blue flowers. Tr. pkt. (1/128 oz.), **50c**; ¼ oz., **95c**; ⅛ oz., **\$2.70**; ½ oz., **\$4.80**; ¼ oz., **\$8.00**.

CACTUS

ANNUAL

8,000-12,000 S. 6 weeks 70-75°

All Sorts Mixture. Many unusual varieties are included in this choice blend. Must be sown in sandy, well drained material. Potting soil must also be well drained.

Tr. pkt. (⅛ oz.), **\$1.35**; ¼ oz., **\$2.45**; ½ oz., **\$6.00**.

Also see Aloe, page 7.

CALCEOLARIAS

ANNUAL (C. herbeahybrida)

600,000 S. 2-3 weeks 65-75°

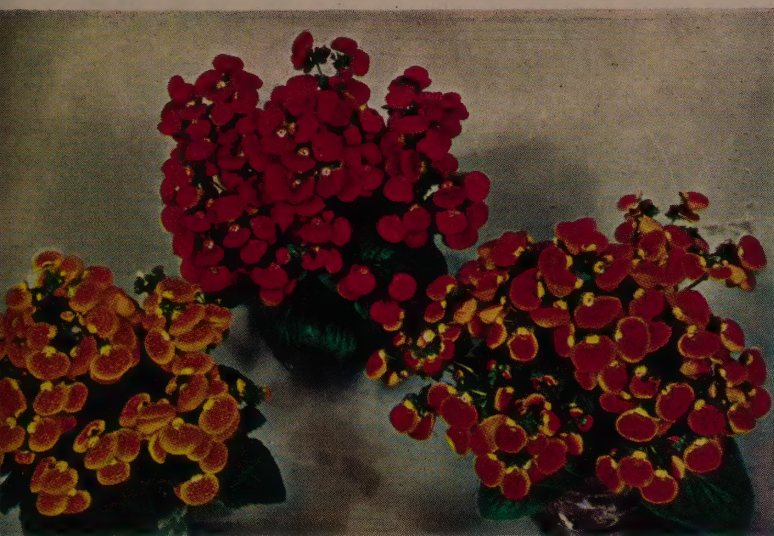
SOW

September

FLOWER

April

This showy "Pocketbook Plant" as it's sometimes called is a native of Tropical America. The seed is very small and should be sown carefully with no covering. Avoid keeping soil too wet after seedlings are well up. When seedlings are large enough to handle, pot into 2¼ inch Jiffy-Pots, then later into 5 inch pots. Grow 48-50° and shade from sun in spring. Sow Oct. 1 for Mother's Day.



CALCEOLARIA BALL MULTIFLORA NANA MIXTURE

Extra Early Tigered. Solid heads of medium large flowers on dwarf plants; good color range. It blooms nearly a month before other varieties, costs less to grow. An extra select strain. Tr. pkt. (1000 seeds), **\$1.65**; 1/128 oz., **\$4.50**; ¼ oz., **\$8.10**; ½ oz., **\$13.50**.

- **Grandiflora Dwarf Mixture.** Extra large (2-2½ in.) flowers in unusual and striking colors are carried on fairly dwarf plants. Tr. pkt. (1000 seeds), **\$1.00**; ¼ oz., **\$4.20**; ½ oz., **\$7.00**.

- **Hybrid Mixture.** An F₁ Hybrid. Showy reds and rich yellows. ½ tr. pkt. (500 seeds), **\$1.75**; tr. pkt. (1000 seeds), **\$3.00**.

Pride of the North. A Rugosa type with small, clear yellow flowers, growing about 8-10 inches tall, for shady locations, only. Sow in January and grow cool.

Tr. pkt. (1000 seeds), **\$1.50**; 5 tr. pkts., **\$6.75**.

- **Ball Multiflora Nana Mixture.** Large heads of medium sized flowers in brilliant reds, yellows and intermediate shades. The dwarf plants are wiry in growth with small, durable leaves which make for ease in handling. Pictured above.

Tr. pkt. (1000 seeds), **\$1.45**; 1/128 oz., **\$4.35**; ¼ oz., **\$7.50**; ½ oz., **\$13.00**.

CALENDULA

ANNUAL (C. officinalis)

3000 S. 2-3 weeks 65-75°

GREENHOUSE VARIETIES

Ball Calendulas were originated and developed by Geo. J. Ball as his first contribution to our long list of "Flower Seeds for Florists." Four-inch flowers can be had by growing cool (45-50°) and disbudding. Space plants about 12 x 12 inches.

This long-stemmed class will flower freely during the spring months from a January sowing. Sow Aug.-Sept. for midwinter cutting.

- **Ball Improved Long Orange.** Bright orange with light eye.

Ball Masterpiece. Deep glowing orange with dark eye.

Ball Lemon Queen. Lemon-yellow with dark brown eye.

- **Ball Gold.** Deep golden yellow with light eye.

Ball Formula Mixture. Carefully made up of our named varieties with fully half orange.

Prices above 5, each: tr. pkt. (⅛ oz.), **50c**; ¼ oz., **\$1.00**; 1 oz., **\$3.00**; 4 ozs., **\$9.00**; 1 lb., **\$27.00**.

Ball Art Shades Mixture. Contains many original and unusual shades and interesting bicolors. Tr. pkt. (⅛ oz.), **40c**; ¼ oz., **80c**; 1 oz., **\$2.40**; 4 ozs., **\$7.20**; 1 lb., **\$21.50**.

BEDDING VARIETIES

SOW	SPACE	FLOWER
Mar.-Apr.	10-12 in.	June to frost.

Sometimes called Pot Marigolds, Calendulas are natives of Southern Europe. They grow about 15 inches tall in our area producing a liberal quantity of 3 inch double flowers. They make their best showing in localities where summer temperatures are not extreme, but will bloom freely, although with somewhat smaller semi-double flowers, in warmer sections. Their popularity is increasing.



Lemon Queen. Light lemon-yellow.

Orange King. Deep orange with dark eye.

Ball Bedding Mixture. Well proportioned dwarf mixture.

Prices above 3, each: ¼ oz., **50c**; 1 oz., **\$1.50**; 4 ozs., **\$4.50**; 1 lb., **\$13.50**.

Pacific Beauties

15 in. These improved Calendulas are more resistant to summer heat than the ordinary bedding class. Originator's seed.

Apricot Beauty. Attractive two-toned rich apricot.

Flame Beauty (New). Clear, deep orange.

- **Lemon Beauty.** A pure lemon-yellow; wide petals.

- **Persimmon Beauty.** Brilliant, true persimmon-orange.

Pacific Beauty Mixture. A blend of the above four.

Prices above 5, each: ¼ oz., **60c**; 1 oz., **\$2.00**; 4 ozs., **\$6.00**; 1 lb., **\$18.00**.

The dot (•) indicates varieties most dependably satisfactory in our experience and observation.



SEE PAGE 6 FOR
SWEET SIXTEEN PETUNIA AND ANNUAL
COLLECTIONS

CAMPANULA (Bell Flower)

ANNUAL (C. species) 50,000 S. 2-3 weeks 65-75°

Annual Canterbury Bells Mixture. 2 ft. An annual form of the well known perennial, flowering 6 months from sowing. Tr. pkt. ($\frac{1}{8}$ oz.), **50c**; $\frac{1}{4}$ oz., **\$1.50**; 1 oz., **\$4.50**.

PERENNIAL (C. species) S. See below 2-3 weeks 65-75°

SOW	SPACE	FLOWER
Apr.-May	8-12 in.	June to Aug.

Bell Flowers or Canterbury Bells are the common names of this popular perennial. The seed is quite small, so should be sown thinly and not covered. To force Campanula for April greenhouse flowering, sow in March and grow on in pots in an outdoor frame. After the first frost bring them inside and start forcing at 40-45°, gradually warming up to 50°.



CARPATICA. 350,000 S. 12 in. Wide, upright, cup-shaped flowers are borne on slender, erect stems. Plants are leafy, compact clumps.

Cullinmore Mixture. Contains many new colors in this dwarf class.

Tr. pkt. ($\frac{1}{8}$ oz.), **25c**; $\frac{1}{4}$ oz., **\$1.00**; $\frac{1}{2}$ oz., **\$1.65**; 1 oz., **\$4.75**.

• **Rock Garden Blend.** Desirable, low-growing kinds in a wide range of Campanula colors. Tr. pkt. (1/128 oz.), **75c**.

MEDIUM CALYCANTHEMA (Cup-and-Saucer Type). 120,000 S. 3 ft. Biennial. Both this and the following (Medium Double) are easily forced for spring greenhouse cut flowers.

Dark Blue	Light Blue	Rose	White	Mixture
Prices above 5, each: tr. pkt. ($\frac{1}{8}$ oz.), 30c ; $\frac{1}{4}$ oz., 80c ; 1 oz., \$2.40 ; 4 ozs., \$7.15 .				

MEDIUM DOUBLE (Canterbury Bells). 102,000 S.

Formula Mixture. Tr. pkt. ($\frac{1}{8}$ oz.), **30c**; $\frac{1}{4}$ oz., **80c**; 1 oz., **\$2.40**; 4 ozs., **\$7.15**.

PERSICIFOLIA. 340,000 S. 2½ ft. Perennial. 1 inch, bell-shaped flowers on stiffly erect stems. 15 inch spikes.

Telham Beauty. Large bells of China blue.

Tr. pkt. ($\frac{1}{32}$ oz.), **40c**; $\frac{1}{8}$ oz., **\$1.00**; $\frac{1}{4}$ oz., **\$1.85**.

CANDYTUFF

ANNUAL (Iberis coronaria) 9500 S. 1-3 weeks 65-75°

SOW	SPACE	FLOWER
Nov.-Jan.	6 x 6 in.	Apr.-May

This old time favorite cut flower originated in the Mediterranean region. It's easily grown, and a valuable source of spring cut flower filler material. Does best on raised benches at 50°. Use a well enriched soil and plenty of water. The Umbellata type may also be flowered outdoors from a spring greenhouse sowing. Use Jiffy-Pots to avoid transplanting check. The dwarf type makes a nice early bedding show.

HYACINTH-FLOWERED

• **Ball Long-Stemmed Giant White.** This is an improved premium quality cut flower strain. Earlier flowering and produces larger heads than ordinary strains. Tr. pkt. ($\frac{1}{8}$ oz.), **75c**; $\frac{1}{4}$ oz., **\$1.15**; 1 oz., **\$3.40**; 4 ozs., **\$10.00**; 1 lb., **\$30.00**.

Giant White, Regular.

Tr. pkt. ($\frac{1}{4}$ oz.), **50c**; 1 oz., **\$1.45**; 4 ozs., **\$4.25**; 1 lb., **\$12.75**.

UMBELLATA

Fairy Mixture. Extra dwarf (8 in.) growth, producing perfectly mounded plants in white, pink, lavender and crimson. Nice for combinations or bedding.

Tr. pkt. ($\frac{1}{8}$ oz.), **40c**; $\frac{1}{4}$ oz., **75c**; 1 oz., **\$2.10**; 4 ozs., **\$6.25**.

Perennial Candytuff. See Iberis, page 32.

CANNA

ANNUAL (C. generalis) 100 S. 8 weeks 65-75°

Giant Mixture. Select your own new varieties from this formula mixture. If sown in January, seedlings will usually bloom the first summer. Soak seed before sowing over good bottom heat. 1 oz. (about 100 seeds), **\$1.50**; 4 ozs., **\$5.00**.

CARNATION

ANNUAL (Dianthus caryophyllus) 14,000 S. 2-3 weeks 65-75°

SOW	SPACE	FLOWER
Feb.-Mar.	8-12 in.	July to Oct.

The ancestors of these showy "Pinks," as they're sometimes called, grow throughout Europe, Asia and Africa. They don't need a rich soil but do need plenty of sun. They're useful in beds and borders, in rock gardens and for cutting. They're free flowering through most of the summer and deserve to be more widely grown by flower garden enthusiasts everywhere.



• **Giant Malmaison, J. M. Bridgeford.** Of sturdy, upright habit. If well grown, supported and disbudded, flowers comparable to those produced in the greenhouse can be had outside where summers are moderate. A superior mixture. Tr. pkt. ($\frac{1}{8}$ oz.), **40c**; $\frac{1}{4}$ oz., **\$1.25**; 1 oz., **\$3.75**.

Marguerite Double Mixture. 15-20 in. Ours is a reselected strain of this very free flowering summer Carnation. An old favorite. Tr. pkt. ($\frac{1}{8}$ oz.), **25c**; $\frac{1}{4}$ oz., **65c**; 1 oz., **\$2.25**.

CHABAUD'S GIANT IMPROVED STRAIN. 15-20 in. The preferred strain for outdoor bedding use.

Cardinal-Red (Sparkler)	Flesh-Pink (Reine Rose)
Deep Rose (Rose Queen)	White (Jeanne Dionis)
Deep Salmon (Aurora)	Yellow (Marie Chabaud)

• **Formula Mixture.** This fine formula mixture includes all Carnation colors. The preferred strain for bedding.

Prices above 7, each: tr. pkt. ($\frac{1}{8}$ oz.), **50c**; $\frac{1}{4}$ oz., **\$1.50**; 1 oz., **\$4.50**; 4 ozs., **\$12.75**.

ENFANT DE NICE. 18-20 in. Upright habit, with long, strong stem bearing flowers 2½ to 3 inches in diameter. Ideal for bedding plant trade.

Red	Salmon	White	Yellow	Formula Mixture
Prices above 5, each: tr. pkt. ($\frac{1}{32}$ oz.), 55c ; $\frac{1}{8}$ oz., \$1.00 ; $\frac{1}{4}$ oz., \$3.00 ; 1 oz., \$9.00 ; 4 ozs., \$27.00 .				

PERENNIAL (Dianthus caryophyllus) 14,000 S. 2-3 weeks 65-75°

Vienna Mixture. A choice dwarf mixture. Early blooming and very free flowering.

Tr. pkt. ($\frac{1}{8}$ oz.), **65c**; $\frac{1}{4}$ oz., **\$2.00**; 1 oz., **\$6.00**; 4 ozs., **\$18.00**.

GRENADIN (Hardy Carnation). 20 in. Good for cutting.

King of the Blacks. Darkest red.

Golden Sun	• Pink	• Red	White
-------------------	---------------	--------------	--------------

• **Mixture.** A specially blended strain with extra large flowers.

Prices above 6, each: tr. pkt. ($\frac{1}{32}$ oz.), **60c**; $\frac{1}{4}$ oz., **\$2.00**; 1 oz., **\$6.50**; 4 ozs., **\$19.50**.

CASSIA

ANNUAL (C. alata) 650 S. 65-75°

Candle Tree. A rapid-growing tropical bush with yellow candleabra-like flowers. Reaches a height of 5 to 6 ft. in one season. Recommended for frost-free southern areas only. $\frac{1}{4}$ oz., **\$1.60**; 1 oz., **\$4.75**; 4 ozs., **\$14.00**; $\frac{1}{2}$ lb., **\$27.00**; 1 lb., **\$48**.

Castor Bean. See Ricinus, page 53.

"GROWER TALKS"

The only commercial monthly publication which is devoted **exclusively to flower growing**. Suggestions for items to grow, sowing dates, insect and disease controls, varieties, etc. Yours for 1 year for **\$1.25**; 3 years for **\$3.50**.

Binder for 24 issues of **GROWER TALKS**, **\$2.50**





CELOSIA FOREST FIRE & AGERATUM BLUE MINK. A striking combination for an annual border.

Celosia

Annual (*C. argentea cristata*) 28,000 S. 1-2 weeks 65-75°

SOW
See below

SPACE
10-18 in.

FLOWER
July to frost.

There are two distinct forms of this popular plant; the feathery Plumosa type and the "Cockscomb" or Cristata type. All are natives of the warmer sections of Africa, Asia and America, so they need plenty of heat to do well. Sow about six weeks before planting out time and grow on in at least 60°. Early sowing and cold temperatures check plants into flower prematurely, spoiling later performance.

DWARF FEATHER VARIETIES

These "feather" varieties are really outstanding as a bedding subject where a rather dwarf, strong color accent is wanted. Also used for combinations and pots.

- **Fiery Feather.** 12 in. Very attractive pyramid formation with fiery red spires.
- **Golden Feather.** 12 in. Same as above but golden yellow.
- **Feather Mixture.** A formula mixture of the above two varieties; $\frac{2}{3}$ Fiery Feather, $\frac{1}{3}$ Golden Feather.
Prices above 3, each: tr. pkt. ($\frac{1}{32}$ oz.), 30c; $\frac{1}{8}$ oz., 75c; $\frac{1}{4}$ oz., \$1.45; 1 oz., \$4.25; 4 ozs., \$12.75.

PLUMOSA

Plumed or feathery type, producing spire-like branches, mostly from base of plant. The dwarf varieties are widely used for bedding and as spring and summer pot plants, while the taller strains make useful cut flowers in late summer.

Golden Fleece. 4 ft. Large, dense golden-yellow plumes on vigorous plants. Makes a good cut flower.

Scarlet Plume. 4 ft. Bright crimson-scarlet. Very colorful for fall borders and cutting.

Prices above 2, each: tr. pkt. ($\frac{1}{16}$ oz.), 40c; $\frac{1}{4}$ oz., \$1.20; 1 oz., \$3.60.

- **Forest Fire.** 2½ ft. Brilliant plumes of fiery orange-scarlet contrast strikingly with the bronzy red foliage. Improved strain. Pictured above.
Tr. pkt. ($\frac{1}{16}$ oz.), 50c; $\frac{1}{4}$ oz., \$1.50; 1 oz., \$4.50.

PLUMOSA (Cont'd)

- **Thompsoni Magnifica.** 2½ ft. Contains strikingly brilliant reds and yellows with some copper and gold shades. This makes an excellent cut flower.
Tr. pkt. ($\frac{1}{16}$ oz.), 30c; $\frac{1}{4}$ oz., 60c; 1 oz., \$2.00; 4 ozs., \$5.75.

CRISTATA

The popular Cockscomb type. The taller varieties provide good cut flowers in either the fresh or dried state. Dwarf kinds make nice borders or pot plants in summer. Closer spacing decreases size of heads, making them more suitable for cutting.

Empress (Dwarf). 12 in. Large crimson combs with deep reddish leaves.

Tr. pkt. ($\frac{1}{16}$ oz.), 30c; $\frac{1}{4}$ oz., 85c; 1 oz., \$2.45; 4 ozs., \$7.25.

Gilbert's Gold Dust. 2 ft. Yellow, turning a deep gold.

Gilbert's Rose Beauty. 2 ft. Ruffled, ball-shaped heads of bright rose.

Prices above 2 each: Originator's tr. pkt. (300 seeds), 75c; 5 pkts., \$3.35.

Gladiator. 8 in. Golden yellow combs on dwarf plants with light green leaves.

Tr. pkt. ($\frac{1}{16}$ oz.), 50c; $\frac{1}{4}$ oz., \$1.50; 1 oz., \$4.50.

- **Kardinal.** 8 in. Immense red blooms on extremely dwarf plants make Kardinal quite striking. Useful for pots, bedding, borders and combinations.

Tr. pkt. ($\frac{1}{32}$ oz.), 55c; $\frac{1}{8}$ oz., \$1.10; $\frac{1}{4}$ oz., \$2.00; 1 oz., \$6.00.

- **Toreador.** Large combs up to 12 inches across of lustrous, bright red are carried on plants 18-20 inches high. Ball Orig. Seed.

Tr. pkt. ($\frac{1}{16}$ oz.), 60c; $\frac{1}{4}$ oz., \$1.40; 1 oz., \$4.00; 4 ozs., \$12.00.

Dwarf Mixture. 8 in. A good field-grown mixture of all colors in this class.

Tr. pkt. ($\frac{1}{16}$ oz.), 35c; $\frac{1}{4}$ oz., 75c; 1 oz., \$2.25; 4 ozs., \$6.75.

Tall Mixture. 3½ ft. Mixture of all colors in the tall class.

Tr. pkt. ($\frac{1}{16}$ oz.), 40c; $\frac{1}{4}$ oz., 75c; 1 oz., \$2.00; 4 ozs., \$6.00.

- **Jewel Box.** 4-5 in. Dwarf mixture of large combs from white and light yellow to pink, red and purple.
300 seeds, 75c; 1000 seeds, \$2.25; 5000 seeds, \$10.00.

CENTAUREA

ANNUAL (C. species)

7000 S. 2-4 weeks 65-75°

SOW Mar.-Apr. **SPACE** 12-18 in. **FLOWER** July to Sept.

Bachelor's Button and Cornflower are the names by which Centaureas are commonly known. They originally came from southern Europe, but are grown throughout the world today. They're quite easy to grow and may be started under glass or sown directly in the open. May also be sown outdoors in the fall for June flowering, or a Dec.-Jan. sowing grown in the greenhouse will flower for May cutting.



CYANUS (Bachelor Button or Cornflower). 2½ ft.

- **Blue Boy.** The bright blue of this popular Cornflower has been prized by gardeners for years. Be sure to grow plenty for your bedding plant customers.

- **Pinkie** (Rosie). Rose pink.

Red Boy. Deep carmine-rose.

- **Snowman.** Fine clear white.

Formula Mixture.

Prices above 5, each: ¼ oz., **30c**; 1 oz., **85c**; 4 ozs., **\$2.45**; 1 lb., **\$7.25**.

DWARF CENTAUREAS

Dwarf and bushy. Ideal for borders and general bedding. Height 10-12 in. Also make a satisfactory pot plant.

- **Jubilee Gem.** Bright cornflower-blue. ¼ oz., **60c**; 1 oz., **\$1.60**; 4 ozs., **\$4.50**.

IMPERIALIS (Sweet Sultan). 30 in. Very showy thistle-like flowers; larger than the Cyanus type.

Suaveolens (Yellow Sweet Sultan). 20 in. Bright yellow. Forces well indoors. Tr. pkt. (⅓ oz.), **45c**; ¼ oz., **80c**; 1 oz., **\$2.40**.

Dusty Miller. See page 23.

PERENNIAL (C. montana) 1600 S. 3-4 weeks 65-75°

Montana. 2 ft. Large cornflower-blue flowers.

Tr. pkt. (⅓ oz.), **30c**; ¼ oz., **50c**; 1 oz., **\$1.50**; 4 ozs., **\$4.50**.

CERASTIUM

PERENNIAL (C. tomentosum) 42,000 S. 2-4 weeks 65-75°

Tomentosum. 10 to 12 in. An excellent spreading garden perennial with silvery foliage and small white flowers.

Tr. pkt. (⅓ oz.), **30c**; ¼ oz., **60c**; 1 oz., **\$1.80**.

CHEIRANTHUS (Siberian Wallflower)

PERENNIAL (C. cheiri) 19,000 S. 2-3 weeks 65-75°

Does best in cool climates.

Golden Bedder. 18 in. Large, deep golden yellow.

Tr. pkt. (⅓ oz.), **25c**; ¼ oz., **40c**; 1 oz., **\$1.20**.

Annual Wallflower. See page 70.

NEED EXTRA SPACE FOR BEDDING PLANTS?

Many growers are finding that MYLAR covered cold frames or an extra MYLAR house built especially for bedding plants is the answer to the space problem at the busiest time of year.

CHERRY, CHRISTMAS

ANNUAL (Solanum pseudo-capsicum) 12,000 S. 3-4 weeks 65-75°

SOW February

FLOWER Fruits in Dec.

Also called Jerusalem Cherry, this showy Christmas plant originated in the old World. Plants should be grown at 50° after germination. Keep them moving — don't let them become pot-bound. Usually carried through the summer in 4 inch pots, plunged in frames. Pinch occasionally but not after July 1. Bring inside in September and make final shift to 5 or 6 inch pots.



- **Ball Christmas Cherry** (Hlavacek's Masterpiece). A uniform, bushy strain. Large, round, red fruit is very freely produced. Tr. pkt. (⅓ oz.), **65c**; ¼ oz., **\$1.80**; 1 oz., **\$5.20**.

Patterson Christmas Cherry. More dwarf and compact than Ball Christmas Cherry. Well suited for smaller sized pots. Tr. pkt. (⅓ oz.), **50c**; ¼ oz., **\$1.50**; 1 oz., **\$4.75**.

See also Pepper, Christmas, page 39 and Love Apple, page 33.

CHRYSANTHEMUM

ANNUAL (C. species) 9000 S. 2-5 weeks 65-75°

A nice spring greenhouse "catch crop" for cutting. Also quite showy for bedding.

- **Rainbow Mixture** (Carinatum). 2 ft. A brilliant mixture of annual Chrysanthemums including many entirely new shades and color combinations.

Tr. pkt. (⅓ oz.), **25c**; ¼ oz., **75c**; 1 oz., **\$2.25**.

PERENNIAL (C. species) 70,000 S. 2-4 weeks 65-75°

Korean Mixture. 1½ to 2 ft. Single and semi-double types in a good color range. Some bloom rather late for localities with early frost dates.

Tr. pkt. (⅓ oz.), **\$1.00**; ⅓ oz., **\$2.50**; ¼ oz., **\$4.50**.

- **Mikado.** A hand-pollinated mixture of greenhouse cut flower varieties in a wide color range. Large Mums, Pompons, Anemones, and Spider types are included in this novel assortment. Seed sown in March will produce flowers the following fall and early winter. Specimens may be propagated by cuttings, so here's a chance to develop your own new varieties. Tr. pkt. (250 seeds), **\$2.50**.

CINERARIA

ANNUAL (Senecio cruentus) 150,000 S. 2-3 weeks 65-75°

SOW Aug.-Sept.

TO FLOWER Midwinter thru Apr.

This popular and colorful pot plant is a native of the Canary Islands and is botanically Senecio cruentus. It should not be confused with the true Cinerarias which are the white-leaved Dusty Millers. Transplant seedlings to 2¼ inch Jiffy-Pots, then, when they begin to crowd, pot directly to 5 inch pots, being careful not to overwater at this stage. As they become pot bound and show buds, give ample water, light feedings and protection from strong sun.

Trade packets of Cinerarias contain 1/128 oz.

- **Cremer's Prize Strain** (Our own reselected stock). Extra large heads of medium small flowers in widely varied color assortment; about half light-eyed. Small foliage. Tr. pkt., **\$1.75**; ⅓ oz., **\$2.90**; ⅓ oz., **\$5.25**, ⅓ oz., **\$10.00**.

Dwarf Erfurt Mixture. Dense heads of medium sized flowers in a fine color balance, including copper, salmon, and maroon in addition to the usual Cineraria colors. Habit is compact and very uniform. Tr. pkt., **\$1.65**; ⅓ oz., **\$3.00**; ⅓ oz., **\$5.50**.

Dwarf Giant Exhibition Mixture. Extra large flowers on medium dwarf plants. For exhibition work. Tr. pkt., **\$1.85**; ⅓ oz., **\$3.35**; ⅓ oz., **\$6.00**.



CINERARIA FESTIVAL

- **Festival.** This is our own **small-leaved strain** requiring a minimum of bench space. Plants are bushy and compact with even heads of medium sized, mostly white-eyed flowers in a brilliant color range. We're sure this strain is unexcelled. Pictured above. Ball Orig. Seed. $\frac{1}{2}$ tr. pkt., **\$1.75**; tr. pkt., **\$3.00**; $\frac{1}{4}$ oz., **\$4.50**; $\frac{1}{8}$ oz., **\$7.50**; $\frac{1}{16}$ oz., **\$13.00**.

H. & S. Super Giants Superb Mixture. Similar to dwarf Giant Exhibition Mixture. A fine strain in a complete color range. Tr. pkt., **\$1.25**; $\frac{1}{4}$ oz., **\$2.25**; $\frac{1}{8}$ oz., **\$4.00**; $\frac{1}{16}$ oz., **\$7.00**.

- **Multiflora Nana, Gold Center.** 200,000 S. Attractive, medium small, solid colored flowers with yellow anthers. Good shipper. Tr. pkt., **\$1.25**; $\frac{1}{4}$ oz., **\$2.25**; $\frac{1}{8}$ oz., **\$4.00**.

- **No. 2 Mixture.** Contains $\frac{1}{2}$ Cremer's Prize Strain and $\frac{1}{4}$ each Siter's Rainbow Strain and Multiflora Nana, Gold Center Strain. Tr. pkt., **\$1.65**; $\frac{1}{4}$ oz., **\$2.75**; $\frac{1}{8}$ oz., **\$5.00**.

- **Siter's Rainbow Strain.** 112,000 S. Immense heads of medium large, mostly white-eyed flowers. Our own reselected stock. Tr. pkt., **\$1.75**; $\frac{1}{4}$ oz., **\$2.90**; $\frac{1}{8}$ oz., **\$5.25**; $\frac{1}{16}$ oz., **\$10.00**.

"Vivid" Formula Mixture. A complete mixture of solid colors (without "eyes"). Dwarf with well rounded heads and fairly small leaves. Tr. pkt. **\$2.00**; $\frac{1}{4}$ oz., **\$3.50**; $\frac{1}{8}$ oz., **\$6.50**.

Dusty Miller, see page 23.

CLARKIA

ANNUAL (C. elegans) 90,000 S. 1-2 weeks 65-75°

Popular double type for spring cut flower use. Sow in January and grow in flats, disbudding to 2 or 3 spikes for long-stemmed flowers. Don't feed and keep fairly dry after plants are about a foot high to prevent oversoft, lanky growth.

Florist Mixture. Tr. pkt. ($\frac{1}{8}$ oz.), **25c**; $\frac{1}{4}$ oz., **75c**; 1 oz., **\$2.25**; 4 ozs., **\$6.50**.

CLEOME (Spider Plant)

ANNUAL (C. spinosa) 12,500 S. 1-2 weeks 65-75°

SOW	SPACE	FLOWER
Mar.-Apr.	1 x 3 ft.	July to Sept.

This popular Spider Plant, as it's often called, being a native of the South American jungles, enjoys summer heat and lots of moisture. It grows as easily as a weed, and its large, showy flowers and lush growth make an excellent hedge-like planting for background work. New flowers are constantly formed leaving attractive, long, slender seed pods as the old blooms drop off.



Golden Sparkler (C. lutea). 5500 S. 3 ft. Bright golden orange. An unusual Cleome color. Germinate cool or sow directly outside. Tr. pkt. ($\frac{1}{8}$ oz.), **65c**; $\frac{1}{4}$ oz., **\$1.60**; 1 oz., **\$4.50**.

Helen Campbell. Identical to Pink Queen except for its glistening pure white flowers. Tr. pkt. ($\frac{1}{8}$ oz.), **50c**; $\frac{1}{4}$ oz., **85c**; 1 oz., **\$2.50**.

CLEOME (Cont'd)

- **Pink Queen.** The newly opened flowers of the large (6 to 7 in.) heads are a luminous rosy pink, later changing to pure white for a pleasing bicolor effect. Makes a gorgeous hedge-like row about 4 ft. tall and 3 to 4 ft. across. Tr. pkt. ($\frac{1}{8}$ oz.), **35c**; $\frac{1}{4}$ oz., **65c**; 1 oz., **\$1.75**; 4 ozs., **\$5.00**.

Purple Queen. 5 ft. Similar to Pink Queen, but with large heads of lilac-purple flowers.

Tr. pkt. ($\frac{1}{8}$ oz.), **50c**; $\frac{1}{4}$ oz., **85c**; 1 oz., **\$2.50**.

COBAEA (Cup-and-Saucer Vine)

ANNUAL (C. scandens) 375 S. 2-3 weeks 65-75°

A popular, strong growing annual climber with 2-in. bell-shaped flowers. Reaches 20 ft.

Purple. $\frac{1}{4}$ oz., **65c**; 1 oz., **\$1.80**; 4 ozs., **\$5.25**.

COLEUS

See pages 20-21.

COREOPSIS

PERENNIAL (C. grandiflora) 11,000 S. 2-3 weeks 65-75°

The long, graceful stems and rich, golden yellow color give this plant real value for cutting. We find it best treated as a biennial.

- **Sunburst.** 2 ft. A fine semi-double strain with 2-inch, golden yellow flowers. Tr. pkt. ($\frac{1}{4}$ oz.), **40c**; 1 oz., **\$1.20**; 4 ozs., **\$3.50**.

CORN, ORNAMENTAL

ANNUAL (Zea Mays) 90 S. 1 week 65-75°

Rainbow (Calico or Indian Squaw). Kernels of various colors make attractive ears for fall decoration.

1 oz., **20c**; 4 ozs., **50c**; 1 lb., **\$1.50**.

Strawberry. 590 S. Tiny 2-in. ears of rich, shiny mahogany contrast with the straw-colored husks when folded back. 1 oz., **40c**; 4 ozs., **\$1.40**; 1 lb., **\$4.00**.

Striped. 6-8 ft. Here is an ornamental-leaved Corn, the foliage of which is quite attractive with its contrasting clear yellow stripes on dark green. Try the leaves in floral arrangements. 1 oz., **40c**; 4 ozs., **\$1.40**; 1 lb., **\$4.00**.

COSMOS

ANNUAL (C. bipinnatus) 5000 S. 2-4 weeks 65-75°

SENSATION. 3 ft. The most satisfactory class of Cosmos to grow for cut flower purposes. Extra large flowers and extreme earliness make them suitable for growing outdoors even in northern climates.

- **Pinkie.** Clear orchid-pink.
 - **Purity.** Extra large flowered pure white.
 - **Radiance.** Deep rose petals with large, rich crimson eye.
 - **Mixture** of above and other shades.
- Prices** above 4, each: tr. pkt. ($\frac{1}{8}$ oz.), **30c**; $\frac{1}{4}$ oz., **50c**; 1 oz., **\$1.50**; 4 ozs., **\$4.25**.

CROSSANDRA. For potted plants.

ANNUAL (C. infundibuliformis) 4000 S. 7-12 weeks 75-80°

Attractive and valuable pot plant with glossy, Gardenia-like foliage, and flower spikes of overlapping clear salmon florets. Can be sown at any time but most easily started in early spring. Flowers in 7 to 8 months in a warm house and in rich, well drained soil. Minimum of 65° for best growth.

50 seeds, **\$2.00**; 200 seeds, **\$6.00**; 1000 seeds **\$24.00**.

CUPHEA

ANNUAL (C. Llavea miniata) 7000 S. 2-3 weeks 65-75°

Very attractive and easily grown bedding plants.

- **Firefly.** 12 in. Dense, compact plants; freely produced, small, bright scarlet flowers. Also an attractive spring pot plant. Tr. pkt. ($\frac{1}{8}$ oz.), **40c**; $\frac{1}{4}$ oz., **75c**; $\frac{1}{2}$ oz., **\$1.35**; 1 oz., **\$4.00**.



CANDIDUM



GOLDEN RAINBOW

Coleus Ball Rainbow Annual (C. blumei) 100,000 S. 2-3 weeks 70-80°

SOW
Feb.

SPACE
12 x 12 in.

FLOWER
Foliage June to frost.

This popular foliage plant is a native of Java, and has been prized by plant hobbyists for generations. For years, dozens of varieties have been maintained and propagated by cuttings, but the new Ball separate color varieties from seed have made costly cutting propagation unnecessary. The strains are over 90% true to type, since all seed is produced under our own personal supervision.

After pricking off into Jiffy-Pots or Paks they should be grown at a steady 60° night temperature. Since the value of these plants depends upon their decorative foliage, flower buds should be pinched out as soon as they begin to form. Coleus are widely used as pot plants, in combination work, and for bedding in shady or semi-shady locations.

- **Candidum.** Pictured above. A striking combination of brilliant green and soft ivory. Wonderfully showy for use in plant combinations, blending well with all other colors. 90% true to type.
- **Golden Rainbow.** Pictured above. A rich, golden chartreuse flecked with pale green. Makes a wonderful contrast with red leaved varieties. 90% true to type.
- **Pastel Rainbow.** Pictured on opposite page. Soft shades of light salmon-pink and pale green provide a wealth of spring-like freshness in this pleasing variety. 90% true to type.
- **Pink Rainbow.** Pictured on opposite page. Medium sized leaves of rich coral-pink blending to salmon with small green border. Unusually attractive and 90% true to type.
- **Red Rainbow Improved.** Pictured on opposite page. A bright combination of deep mahogany-red and brilliant carmine-rose edged green. Bushy plants with medium sized leaves. 90% true to type.

- **Scarlet Rainbow.** Pictured on opposite page. Brilliant scarlet-red with narrow green edge. The most colorful of all when plants are the size for combination use. Darkens somewhat as plants grow larger and older. 90% true to type.
- **Velvet Rainbow.** Pictured at right, below. Visitors at our green-houses have frequently remarked about the wonderful brilliance of this blood-red variety with darker velvety overtones. 90% true to type.



Ball Straight Color Mixture

A Sweet Sixteen Selection for 1963. At the request of many of our customers, we offer this mixture, blended by formula from the above 7 separate color varieties only. Contains none of the brownish shades present in most mixtures.

Prices above 5, each: 1/2 tr. pkt., **\$1.50**; tr. pkt., **\$2.50**; 1/4 oz., **\$3.30**; 1/8 oz., **\$6.00**; 1/16 oz., **\$11.00**; 1/32 oz., **\$20.00**; 1/64 oz., **\$38.90**; 1/128 oz., **\$68.00**; 1 oz., **\$116.00**.

Prices above 3, each: 1/2 tr. pkt., **\$1.50**; tr. pkt., **\$2.50**; 1/4 oz., **\$3.30**; 1/8 oz., **\$6.00**; 1/16 oz., **\$11.00**; 1/32 oz., **\$20.00**; 1/64 oz., **\$38.90**; 1/128 oz., **\$68.00**; 1 oz., **\$116.00**.

COLLECTION: Tr. pkt. each of Pastel Rainbow, Velvet Rainbow, Scarlet Rainbow, Red Rainbow, Pink Rainbow Imp., Golden Rainbow, and Candidum. 7 tr. pkts. for **\$15.75**.

The dot (•) indicates varieties most dependably satisfactory in our experience and observation.

OTHER VARIETIES

- **Ball Copper Giant.** Large leaves of copper-rose. 75% true to type. Tr. pkt., **\$1.50**; 1/2 oz., **\$4.00**; 1/4 oz., **\$7.50**; 1/8 oz., **\$15.00**.
- **Giant Exhibition Mixture.** An extra large-leaved strain with exceptional brilliance of coloring. Tr. pkt., **\$1.25**; 1/2 oz., **\$2.50**; 1/4 oz., **\$4.75**; 1/8 oz., **\$9.25**.
- **Standard Mixture.** This is a European field-grown reproduction of our Ball Rainbow Strain. Tr. pkt., **75c**; 1/2 oz., **\$1.80**; 1/4 oz., **\$3.25**; 1/8 oz., **\$5.85**; 1/16 oz., **\$10.50**; 1/32 oz., **\$17.00**; 1 oz., **\$30.00**.



PASTEL RAINBOW



▲ PINK RAINBOW

RED RAINBOW ▼



IMPORTANT!

Seed of all Ball greenhouse-grown Coleus varieties, including our Rainbow Mixture, is produced at West Chicago each year from carefully controlled parent lines. It is important that genuine Ball Originator's Seed be used if top quality is wanted. Other strains are, of necessity, 2 generations removed from the original breeding stock, and often give unsatisfactory results.

- **BALL RAINBOW MIXTURE.** We have trialed all important Coleus mixtures — none match this strain for its high percentage of bright warm Coleus colors which even excel the brilliance and luster of many of the best known cutting propagated varieties. Rich reds, yellows, coppers, pinks, all abound in infinite varieties of tones and shades. Ideal for combination, shade planting, and wherever Coleus are useful. This seed is greenhouse-grown at West Chicago.

$\frac{1}{2}$ tr. pkt., \$1.00; tr. pkt., \$1.75; $\frac{1}{8}$ oz., \$2.75; $\frac{1}{32}$ oz., \$5.25; $\frac{1}{16}$ oz., \$9.50; $\frac{1}{8}$ oz., \$17.00; $\frac{1}{4}$ oz., \$30.00; $\frac{1}{2}$ oz., \$50.00; 1 oz., \$90.00.



VELVET RAINBOW



SCARLET RAINBOW



CYCLAMEN

ANNUAL (*C. indicum giganteum*)

2500 S. 3-4 weeks 60-65°

SOW Sept.-Nov. **FLOWER** 15 months after sowing.

These popular pot plants trace their origin back to the Eastern Mediterranean area from Greece to Syria. Sow seed $\frac{1}{4}$ to $\frac{1}{2}$ inch deep. Carry flats at 60-65° until germination, then drop to 55°. Transplant, when seedlings start to crowd, in 3 inch Jiffy-Pots or in flats spacing 3 x 3 inches. Then shift to 4, 5 or 6 inch pots. Grow through the summer in a shaded and ventilated area. Make final shift Sept. 10 for Christmas plants. Grow at 50°.



- No. 1 Dark Blood-Red.**
 - **No. 2 Bright Red.**
 - **No. 3 Pure Rose** (Rose of Aalsmeer). Medium salmon-pink.
 - No. 4 Soft Rose with Carmine Eye.** Orchid-rose; wine-red eye.
 - No. 5 White with Carmine Eye.**
 - **No. 6 Pure White.**
 - **No. 7 Bonfire.** Brilliant scarlet-salmon.
 - No. 8 Salmon-Scarlet** (America-Imp.)
 - **No. 10 Glory of Wandsbek** (Perle of Zehlendorf). Bright deep salmon.
 - **No. 11 Rose of Zehlendorf.** Light salmon.
 - Prices** above 20, each: 100 seeds, **\$2.50**; 250 seeds, **\$5.00**; 1000 seeds, **\$20.00**.
 - **No. 30 Mixture** of above colors. 100 seeds, **\$2.00**; 250 seeds, **\$3.75**; 1000 seeds, **\$15.00**.
- Please order in units of 100, 250, 500, or 1000.

No. 13 Rococo Mixture. Fringed flowers; unusual shapes and markings.

No. 16 Saffron-Red, Silver Edged.

- **No. 17 Striped Mixture.** Unusually showy and attractive.

No. 19 Lavender. Bright fuchsia-orchid.

No. 21 Pink Pearl. Salmon-pink.

No. 22 Baardse Wonder. Salmon with white border.

No. 26 Victoria. Fringed white, tipped red.

No. 51 Ruffled Salmon.

No. 52 Ruffled White.

- **No. 60 Ruffled Mixture.**

VOGT'S DOUBLE-FLOWERED STRAIN

Mixture. 100 seeds, **\$3.75**; 250 seeds, **\$7.75**; 500 seeds, **\$14.50**.

PERENNIAL (*C. neapolitanum*) 4000 S. 3-4 weeks 65-75°

Neapolitanum Mixture. Shades of rose and white flowers about $\frac{1}{3}$ the size of annual Cyclamen. Free flowering on 8 to 10-inch stems, in August and September. For best results sow early in fall and carry seedlings through the first winter under glass, transplanting out to partially shaded area in spring. 100 seeds, **\$1.00**; 500 seeds, **\$3.00**.

CYNOGLOSSUM

ANNUAL (*C. amabile*)

5000 S. 2-3 weeks 65-75°

Chinese Forget-Me-Not.

Firmament. 18 in. Fine, bushy, compact plants with freely produced small flowers of the most intense clear blue. An excellent bedding plant that stands hot, dry weather well. Tr. pkt. ($\frac{1}{4}$ oz.), **45c**; 1 oz., **\$1.35**; 4 ozs., **\$4.00**.

Choose the proper growing/selling containers for your trade from our extensive list.

The dot (•) indicates varieties most dependably satisfactory in our experience and observation.

DAHLIA

SOW Feb.-Mar.

SPACE 12 x 12 in.

FLOWER June to Oct.

These gay, colorful plants are natives of Mexico and South America. The seedlings should go into 3 inch Jiffy-Pots since the roots require plenty of room. No pinching is necessary as they branch freely if given sufficient room and not starved. Save the weak seedlings since they often produce the best colors and will grow into good plants. Useful for bedding, cut flowers, and as 4 inch Mother's Day pot plants.

Cactus Mixture. 3 to 4 ft. Large, double and semi-double Cactus type flowers in many colors.

Tr. pkt. ($\frac{1}{8}$ oz.), **\$1.00**; $\frac{1}{4}$ oz., **\$2.50**; 1 oz., **\$7.50**.

Coltess Mixture. Dwarf and free flowering single mixture. Tr. pkt. ($\frac{1}{8}$ oz.), **40c**; $\frac{1}{4}$ oz., **65c**; 1 oz., **\$1.75**; 4 ozs., **\$5.00**.

Extra Dwarf Double. 20 in. Double and semi-double flowers in all colors on bushy plants. Early blooming. Tr. pkt. ($\frac{1}{8}$ oz.), **75c**; $\frac{1}{4}$ oz., **\$1.35**; 1 oz., **\$4.00**; 4 ozs., **\$12.00**; 1 lb., **\$35.00**.

Fall Festival (Zulu). 2½ ft. Single and double flowers in shades of red with some apricot-yellow and purple. Foliage is an unusually attractive bronzy red. Tr. pkt. ($\frac{1}{8}$ oz.), **75c**; $\frac{1}{4}$ oz., **\$1.35**; 1 oz., **\$4.00**.

Giant-Flowered Mixture. 3 to 4 ft. A tall-growing mixture producing 50% giant double flowers of the very best types and colorings. Must be sown early to insure blooms before frost. Tr. pkt. ($\frac{3}{8}$ oz.), **60c**; $\frac{1}{2}$ oz., **\$1.85**; $\frac{3}{4}$ oz., **\$3.50**; 1 oz., **\$10.00**.

Pompon Mixture. 3 ft. Medium to small double and semi-double flowers in a wide color range. Tr. pkt. ($\frac{1}{8}$ oz.), **90c**; $\frac{1}{4}$ oz., **\$1.35**; $\frac{1}{2}$ oz., **\$2.50**; 1 oz., **\$7.50**.



DAHLIA UNWIN'S DWARF MIX. Carlson's of Janesville, Wis., grow several hundred for spring sale. First sowing March 10. Seedlings transplanted to 3 in. Jiffy-Pots, then to final 5's. 58-60° nights.



**SWEET
SIXTEEN**

• UNWIN'S DWARF MIX

A Sweet Sixteen Selection for 1963. The compact, dwarf plants of our special strain (pictured above) produce a profusion of 2½ to 3-inch double and semi-double blooms in a lavish assortment of exquisite colors. Tr. pkt. ($\frac{1}{8}$ oz.), **30c**; $\frac{1}{4}$ oz., **80c**; 1 oz., **\$2.50**; 4 ozs., **\$7.50**; 1 lb., **\$22.50**.

DAISY

ANNUAL

S. See below 14 days 60°

Dahlborg Daisy (*Thymophylla tenuiloba*). 150,000 S. 6 in. An unusually attractive, compact edging plant with airy, lace-like leaves and a profusion of small yellow flowers. Tr. pkt. ($\frac{3}{32}$ oz.), **95c**; $\frac{1}{8}$ oz., **\$2.75**; $\frac{1}{4}$ oz., **\$5.00**.

Takoha Daisy (*Machaeranthera tanacetifolia*). 29,500 S. 2 ft. Single, Daisy-like flowers of lavender-blue with deep yellow centers. Tr. pkt., ($\frac{1}{16}$ oz.), **50c**; $\frac{1}{8}$ oz., **90c**; $\frac{1}{4}$ oz., **\$1.60**; 1 oz., **\$4.80**.

PERENNIAL (*Chrysanthemum maximum*) 21,000 S. 12 days 65°

SOW	SPACE	FLOWER
Jan.-Feb.	12-15 in.	July

SHASTA DAISY. This attractive white flower is one of the horticultural developments of Luther Burbank, so the present day forms are not found in nature, even though the original species is native to the Pyrenes. They are best treated as biennials and should be planted where soil is well drained. A wet location will winter-kill them as will too heavy a winter covering.



• **G. Marconi.** 18,000 S. The largest flowered and finest double Shasta Daisy strain from seed. Long-stemmed. Tr. pkt. ($\frac{1}{32}$ oz.), **55c**; $\frac{1}{8}$ oz., **\$1.65**; $\frac{1}{4}$ oz., **\$3.00**; 1 oz., **\$9.00**.

• **Alaska.** The standard Shasta Daisy. July. Tr. pkt. ($\frac{1}{16}$ oz.), **25c**; $\frac{1}{4}$ oz., **60c**; 1 oz., **\$1.50**; 4 ozs., **\$4.35**.

English Daisy. See Bellis, page 12.

Gloriosa Daisy. See Rudbeckia, page 56.

Painted Daisy. See Pyrethrum, page 53.

DATURA

ANNUAL (*D. species*)

2500 S. 2-3 weeks 65-75°

Wrightii (Angel's Trumpet). 3 ft. Large, white, tinted orchid flowers. Tr. pkt., ($\frac{1}{8}$ oz.), **50c**; $\frac{1}{4}$ oz., **85c**; 1 oz., **\$2.50**.

DELPHINIUM. See page 24.

DIANTHUS. See page 25.

DICENTRA

PERENNIAL (*D. species*)

S. See below Frost germinator

Must be exposed to freezing temperatures for normal germination.

Spectabilis (Bleeding Heart). 6000 S. 3 ft. Rosy red flowers. Tr. pkt. ($\frac{1}{16}$ oz.), **\$1.40**; $\frac{1}{32}$ oz., **\$2.50**; $\frac{1}{8}$ oz., **\$7.50**; $\frac{1}{2}$ oz., **\$22.50**.

Eximia (Plumy Bleeding Heart). 16,000 S. Dwarf. 12 in. Rose-pink. Tr. pkt. ($\frac{1}{16}$ oz.), **50c**; $\frac{1}{4}$ oz., **\$1.50**; 1 oz., **\$4.50**.

DICTAMNUS

PERENNIAL (*D. fraxinella*)

1700 S. Frost germinator

Must be exposed to freezing temperatures for normal germination.

Fraxinella (Gas Plant). 2½ ft. Pink flowers with dark veins. Tr. pkt. ($\frac{1}{4}$ oz.), **75c**; 1 oz., **\$2.25**; 4 ozs., **\$6.25**.

DIDISCUS

ANNUAL (*Trachymene caerulea*)

10,000 S. 2-3 weeks 65-75°

24 to 30 in. Useful for spring forcing or outdoors in cool climate.

Blue Lace (*Caeruleus*). Small heads of light lavender flowers in sprays. Tr. pkt. ($\frac{1}{16}$ oz.), **25c**; $\frac{1}{4}$ oz., **75c**; 1 oz., **\$2.00**.

DIGITALIS (Foxglove)

PERENNIAL (*D. Purpurea gloxiniaeflora*)

180,000 S. 2-3 weeks 65-75°

4 ft. Biennial. This is an extra large flowered strain.

• **Excelsior.** This unusually fine Foxglove carries its flowers at right angles to the stem rather than drooping downwards as other types do. This feature reveals the full effect of the markings inside each flower. All colors are represented in this complete mixture. Tr. pkt. ($\frac{1}{16}$ oz.), **45c**; $\frac{1}{4}$ oz., **\$1.25**; 1 oz., **\$3.75**.

Giant Shirley Mixture.

Tr. pkt. ($\frac{1}{16}$ oz.), **30c**; $\frac{1}{4}$ oz., **75c**; 1 oz., **\$2.25**.

DIMORPHOTHECA (Cape Marigold)

ANNUAL (*D. aurantiaca*)

9500 S. 2-3 weeks 65-75°

6 to 10 in. A very attractive bedding plant. Spreading habit.

• **Aurantiaca Mixture.** 2 inch, single, daisy-like flowers in bright yellow, buff and orange shades.

Tr. pkt. ($\frac{1}{8}$ oz.), **35c**; $\frac{1}{4}$ oz., **60c**; 1 oz., **\$1.80**.

Glistening White. Large, Daisy-like flowers with black eyes, edged violet. Tr. pkt. ($\frac{1}{8}$ oz.), **60c**; $\frac{1}{4}$ oz., **\$1.15**; 1 oz., **\$3.25**.

DORONICUM (Leopards-Bane)

PERENNIAL (*D. caucasicum*)

18,000 S. 2-3 weeks 65-75°

Caucasicum, Magnificent. 2 ft. Large, yellow, Gerbera-like flowers with long stems. Keep well when cut.

Tr. pkt., ($\frac{1}{32}$ oz.), **50c**; $\frac{1}{8}$ oz., **\$1.25**; $\frac{1}{4}$ oz., **\$2.25**.

DRACAENA

ANNUAL (*Cordyline indivisa*) S. See below 5-7 weeks 65-75°

Indivisa. In the hull. 1500 S. The narrow-leaved and most popular variety. Tr. pkt. ($\frac{1}{4}$ oz.), **40c**; 1 oz., **\$1.20**; 4 ozs., **\$3.60**.

Indivisa, Cleaned. 10,000 S. Hulled seed.

Tr. pkt. ($\frac{1}{16}$ oz.), **35c**; $\frac{1}{4}$ oz., **\$1.00**; 1 oz., **\$3.00**.

DUSTY MILLER

ANNUAL

S. See below 2-4 weeks 65-75°

SOW	SPACE	FLOWER
Feb.-Mar.	6-12 in.	Showy foliage

From southern Europe comes this popular bedding plant with its silvery white foliage. It's used extensively in many areas for contrasting bedding and border effect with many brightly colored annuals. *Centaurea Candidissima* is slower growing and dwarf while *C. Gymnocarpa* is taller for background plantings. *Cineraria Maritima Diamond* also belongs in this group.

Centaurea Candidissima. 7000 S. 6 in. The slow growing kind that must be started early.

Tr. pkt. ($\frac{1}{8}$ oz.), **75c**; $\frac{1}{4}$ oz., **\$1.25**; 1 oz., **\$3.75**; 4 ozs., **\$11.00**.

Centaurea Gymnocarpa. 7000 S. 2 ft. Strong growing, fern-leaved.

Tr. pkt. ($\frac{1}{8}$ oz.), **35c**; $\frac{1}{4}$ oz., **60c**; 1 oz., **\$1.80**; 4 ozs., **\$5.25**.

• **Cineraria Maritima Diamond** (*Candicans*). 65,000 S. 10 in. An improved strain of our finest Dusty Miller. Compact, even growth and very white foliage.

Tr. pkt. ($\frac{1}{16}$ oz.), **35c**; $\frac{1}{4}$ oz., **\$1.00**; 1 oz., **\$2.85**; 4 ozs., **\$8.50**.

ECHINOPS (Globe Thistle)

PERENNIAL (*E. ritro*)

650 Seed Heads per oz. 65-75°

Ritro. Metallic blue flower heads 1½ to 2 in. across are borne on 2 to 3 ft. plants. Can be dried for winter bouquets.

Tr. pkt. ($\frac{1}{4}$ oz.), **\$1.10**; 1 oz., **\$3.25**.

EREMURUS (Desert Candle)

PERENNIAL (*E. robustus*)

1400 S. Frost germinator

Must be exposed to freezing temperatures for normal germination.

Robustus (Foxtail Lily). 8 ft. Huge, 3 ft. spikes of bright rose-pink. Blooms in 3 years from seed.

Tr. pkt. ($\frac{1}{16}$ oz.), **\$1.50**; $\frac{1}{4}$ oz., **\$4.50**; 1 oz., **\$13.50**.



Mr. Frank Reinelt, originator of the magnificent Giant Pacific Strain of Delphinium which bears his name — Vetterle-Reinelt Strain.



Astolat, the most recent addition to the Giant Pacific Court Series, is distinctive for its unusual shades of pink.

Delphinium

PERENNIAL (D. elatum)

10,000 S. 3-4 weeks 50-60°

Most growers should have a planting of Delphinium for summer cutting. There is a good home gardener demand for started plants in the spring. Either of those requirements can be met by a January or early February sowing carried along in Jiffy-Pots or Plant Bands. Sown this early a good cut can be had the

first summer, with excellent production the following season. For outdoor planting choose a well drained spot since Delphinium tend to rot in wet, heavy soils. Protection from winds is also desirable. Trade packets of Delphinium contain $\frac{1}{8}$ oz.

GIANT PACIFIC COURT SERIES

- **Black Knight.** Deep velvety blue.
- **Blue Bird.** Medium blues; white bees.
- **Blue Jay.** True medium blue, dark bee.
- **Cameliard.** Lavender and rose with white bee.
- **6 Best Mixture.** Formula mixture of the "6 Best" varieties.
- **Round Table.** Contains all above plus many new colors.
- **Prices of above:**
- **Originator's Seed** (Vetterle and Reinelt). An excellent strain of the Giant Pacifics kept uniform and vigorous by the originator. $\frac{1}{2}$ tr. pkt., \$1.25; tr. pkt. \$2.00; $\frac{1}{8}$ oz., \$3.00; $\frac{1}{4}$ oz., \$5.50; 1 oz., \$20.00.
- **Regular Seed.** A satisfactory strain one generation removed from originator's seed. Grown by a reliable seed producer. Tr. pkt., \$1.50; $\frac{1}{8}$ oz., \$2.50; $\frac{1}{4}$ oz., \$4.50; 1 oz., \$15.50.
- **Astolat.** Pale blush-pink shades with several darker tones including a few raspberry-rose. Large cream colored and dark bees. Pictured above, right. $\frac{1}{2}$ tr. pkt., \$1.25; tr. pkt., \$2.00; $\frac{1}{8}$ oz., \$3.00; $\frac{1}{4}$ oz., \$5.50; 1 oz., \$20.00.
- **Galahad.** Clear white Delphinium.
- **Guinevere.** Light pinkish lavender; white bee.
- **King Arthur.** Royal violet with white bee.
- **Summer Skies.** Light blue, white bee.

OUR "6 BEST" GIANT PACIFICS

Black Knight
Blue Bird

Galahad
Guinevere

King Arthur
Summer Skies

COLLECTIONS:

Originator's Seed: 1 tr. pkt. each of 6 Best, \$10.80.

Regular Seed. 1 tr. pkt. each of 6 Best, \$8.00.

OTHER VARIETIES

(All California-grown seed, except where noted).

- **Belladonna Imp.** (Cliveden Beauty). Popular light blue. Tr. pkt., 60c; $\frac{1}{4}$ oz., \$1.45; 1 oz., \$4.25; 4 ozs., \$12.50; 1 lb., \$37.50.
- **Bellamosum Improved.** Standard deep blue. Tr. pkt., 60c; $\frac{1}{4}$ oz., \$1.45; 1 oz., \$4.25; 4 ozs., \$12.50; 1 lb., \$37.50.
- **Blackmore and Langdon Strain.** Shades of blue with contrasting bees. Imported from England. Originator's strain. Tr. pkt., 85c; $\frac{1}{4}$ oz., \$2.50; 1 oz., \$7.50; 4 ozs., \$22.50.
- **Casa Blanca** (New). The only white Belladonna type Delphinium which comes true from seed. Very uniform color, pure white florets. Originator's seed. Tr. pkt. ($\frac{1}{8}$ oz.), 75c; $\frac{1}{4}$ oz., \$2.15; 1 oz., \$6.25; 4 ozs., \$18.75.
- **Lamartine.** Deep bright marine-blue with white eye. Tr. pkt., 55c; $\frac{1}{4}$ oz., \$1.50; 1 oz., \$5.00.
- **Sapphire.** Large flowered bright blue with small golden bee. Tr. pkt., 75c; $\frac{1}{4}$ oz., \$2.00; 1 oz., \$6.00.
- **Wrexham or Hollyhock Strain.** Extra large, tapering spikes. Tr. pkt., 55c; $\frac{1}{4}$ oz., \$1.75; 1 oz., \$6.00; 4 ozs., \$18.00.
- **Giant Pacific Regular Mixture.** All colors. $\frac{1}{8}$ oz., \$1.75; $\frac{1}{4}$ oz., \$3.00; 1 oz., \$8.50.

ANNUAL (D. grandiflorum) 20,000 S. 2-3 weeks 60-70°
DELPHINIUM CHINENSIS. Sow several weeks before most bedding plants for good bloom. Often winters over.

- **Blue Mirror.** 2 ft. Bright navy-blue flowers without spurs. Tr. pkt., 55c; $\frac{1}{4}$ oz., \$1.25; 1 oz., \$3.75.

Dianthus

ANNUAL



BRAVO

ALL-AMERICA SELECTION 1962

A Sweet Sixteen Selection for 1963. Extremely early, brilliant red flowers lasting until late fall. 12 inch plants suitable for pots and any garden use. An ideal novelty and a new color in Dianthus. A "must" for every bedding plant grower. Pictured at right. Tr. pkt. ($\frac{1}{32}$ oz.), 90c; $\frac{1}{8}$ oz., \$1.65; $\frac{1}{4}$ oz., \$5.00; 1 oz., \$15.00.



ANNUAL (D. chinensis)

25,000 S. 2-3 weeks 65-75°

SOW
Mar.-Apr.

SPACE
4-10 in.

FLOWER
June to Oct.

Here's another showy annual that deserves to be more widely grown. It will keep on flowering throughout the summer without any special care. They're natives of widespread areas of Europe, Asia and Africa, and should be handled the same as Petunias. Useful for beds and borders, rock gardens, and the taller forms for cutting. They will also stand severe frosts.

Wee Willie (Annual Sweet William). 3 in. Extra dwarf, single flowered Dianthus, available in a complete range of colors. Plant close together for good effect. Makes a fine display in flats or for combination use, blooming in 6 to 8 weeks from sowing. Tr. pkt. ($\frac{1}{8}$ oz.), 75c; $\frac{1}{4}$ oz., \$2.15; 1 oz., \$6.25; 4 ozs., \$18.50.

Westwood Beauty (D. Heddensis). Pleasing 2 inch, single flowers in shades of red on long stems. Somewhat more resistant to heat than ordinary Dianthus.

Tr. pkt. ($\frac{1}{8}$ oz.), 45c; $\frac{1}{4}$ oz., \$1.25; 1 oz., \$3.60.

- **Sweet Wivelsfield Single Mixture**. 12 in. Probably the most popular of the annual Dianthus. Free flowering and brilliantly colored. Tr. pkt. ($\frac{1}{4}$ oz.), 35c; 1 oz., \$1.00; 4 ozs., \$3.00.

Sweet Wivelsfield Double Mixture. Most flowers either semi-double or double.

Tr. pkt. ($\frac{1}{8}$ oz.), 60c; $\frac{1}{4}$ oz., \$1.00; 1 oz., \$3.00; 4 ozs., \$8.50.

HEDDEWIGI (Double Pinks). 10 in.

- **Double Gaiety**. Brilliant shades in a full range of colors, including bright salmon and scarlet.

Tr. pkt. ($\frac{1}{8}$ oz.), 35c; $\frac{1}{4}$ oz., 85c; 1 oz., \$2.50.

PERENNIAL (D. species)

28,000 S. 2-4 weeks 65-75°

SOW
Jan.-Feb.

SPACE
9-12 in.

FLOWER
May to July

These old fashioned "Pinks" of our grandmother's day are, along with many other perennials, staging a remarkable come-back in popularity today. They're closely related to the annual Dianthus which is itself semi-hardy. Plants like a warm well-drained soil of fairly high pH. They need full sun, good air circulation and will benefit from a light winter protection.

DIANTHUS (Cont'd)

Allwoodi Alpinus Mixture. 8-10 in. $1\frac{1}{2}$ inch single flowers in shades of pink. Early June.

Tr. pkt. ($\frac{1}{32}$ oz.), 60c; $\frac{1}{8}$ oz., \$1.65; $\frac{1}{4}$ oz., \$2.90.

- **Deltoides Erecta**. 6 in. May-June flowering. A dwarf rose "Maiden Pink." A fine substitute for creeping Phlox for rock gardens and borders.

Tr. pkt. ($\frac{1}{32}$ oz.), 35c; $\frac{1}{8}$ oz., \$1.00; $\frac{1}{4}$ oz., \$1.75.

Latifolius Atrococcineus. 38,000 S. Clusters of bright crimson flowers on individual 12 to 15 inch stems. Fine for cutting May-June.

Tr. pkt. ($\frac{1}{32}$ oz.), 65c; $\frac{1}{8}$ oz., \$1.70; $\frac{1}{4}$ oz., \$2.95; 1 oz., \$8.50.

PLUMARIUS (Clove Pink)

Spring Beauty, Double Mixture (Scoticus). Various shades of pink, rose and white, some self colors, others with bright crimson zone. $1\frac{1}{2}$ in. flowers on 12-15 inch stems.

Tr. pkt. ($\frac{1}{32}$ oz.), 35c; $\frac{1}{8}$ oz., \$1.00; $\frac{1}{4}$ oz., \$1.75; 1 oz., \$5.25.

BARBATUS (Sweet William). 18 in. Early June flowering. Perfectly hardy, flowering second season from seed. All varieties listed are single except where noted.

- **Auricula**. Choice mixture of very large flowers with clearly defined eyes.

Giant White. Ours is an extra large flowered strain.

- **Holborn Glory**. Striking combination of crimson center with white border. Very uniform.

- **Newport Salmon** (Pink Beauty). A particularly rich pastel salmon-rose shade. Very attractive.

Prices above 4, each: tr. pkt. ($\frac{1}{8}$ oz.), 35c; $\frac{1}{4}$ oz., 75c; 1 oz., \$2.60.

Scarlet Beauty • **Double Mixture** **Single Mixture**

Prices above 3, each: tr. pkt. ($\frac{1}{8}$ oz.), 35c; $\frac{1}{4}$ oz., 75c; 1 oz., \$2.60; 4 ozs., \$7.00; 1 lb., \$21.00.

- **Double Midget Mixture**. 6 to 8 in. Tr. pkt. ($\frac{1}{8}$ oz.), 40c; $\frac{1}{4}$ oz., 90c; 1 oz., \$3.00; 4 ozs., \$9.00.

- **Single Midget Mixture**. Very fine, neat alpine and rock plant. 4 to 6 in. with dense heads of single Sweet William flowers. Tr. pkt. ($\frac{1}{8}$ oz.), 50c; $\frac{1}{4}$ oz., \$1.25; 1 oz., \$3.50; 4 ozs., \$10.00.

The dot (•) indicates varieties most dependably satisfactory in our experience and observation.

EUPHORBIA

ANNUAL (E. species) S. See below 1-2 weeks 65-75°

Variegata (Snow-on-the-Mountain). 2500 S. 2 ft. Green leaves with white edges. ¼ oz., **30c**; 1 oz., **90c**; 4 ozs., **\$3.00**.

Heterophylla (Annual Poinsettia or Mexican Fire Plant) 5000 S. 3 ft. Upper leaves blotched with red. Tr. pkt. (⅓ oz.), **35c**; ¼ oz., **\$1.00**; 1 oz., **\$3.00**.

PERENNIAL (E. species) S. See below 4-5 weeks 65-75°

Myrsinites. 2500 S. 6 to 8 in. Attractive succulent-like silvery green foliage. Each branch produces a brilliant yellow bract of leaves in May. Tr. pkt. (⅓ oz.), **60c**; ⅓ oz., **\$1.00**; ½ oz., **\$3.00**.

Polychroma. 7000 S. 15-18 in. Bushy plants with bracts of bright yellow changing to rosy bronze. Tr. pkt. (½ oz.), **\$1.00**; ⅓ oz., **\$1.90**; ¼ oz., **\$5.50**.

EXACUM

ANNUAL (E. affine) 1,000,000 S. 2-3 weeks 65-75°

- **Affine**. An excellent summer pot plant with richly fragrant violet-blue flowers. A December-January sowing with 3-5 seedlings in a 4 or 5 inch pot will make fine plants for summer sales. Shade glass during hot weather. Tr. pkt., **\$1.25**; 1/128 oz., **\$3.00**; ¼ oz., **\$5.50**.

FEVERFEW

See Matricaria, page 37.

FREESIA

ANNUAL (F. hybrida) 3000 S. 3 weeks 65°

Freesias are enjoying renewed popularity today, due to the fine new seed strains which make it possible to grow good cut flowers from seed. Seed sown in early spring will produce bulbs in September by withholding water until the tops die down. After a few weeks of rest, the small bulbs should be replanted, spacing them about 2 x 2 inches for blooms in January or February.

- **SUPER GIANTS**. The most choice strain, imported from a European specialist. Large flowers on long stems.

White **Blue and Lilac Shades** **Red and Pink Shades**
Yellow and Orange Shades **Mixture**

Prices above 5, each: tr. pkt. (⅓ oz.), **\$1.35**; ⅓ oz., **\$2.50**; ½ oz., **\$7.50**.

Rainbow Mixture. Attractive mixture of blues, yellows and reds. Tr. pkt. (⅓ oz.), **90c**; ⅓ oz., **\$1.50**; ¼ oz., **\$2.75**; 1 oz., **\$8.25**.

FUCHSIA

ANNUAL (F. hybrida) 70,000 S. 4-6 weeks 65-75°

Special Mixture. A choice mixture of single and double types saved from one of the finest collections in the country. 350 seeds, **\$3.00**; 700 seeds, **\$5.50**; 1400 seeds, **\$10.00**.



GROW AND SELL THEM IN JIFFY POTS. YOU'LL PROFIT MORE AND PICK UP REPEAT BUSINESS — NO WILT — NO SHOCK.

GAILLARDIA

ANNUAL (G. species)

14,000 S. 2-3 weeks 65-75°

SOW	SPACE	FLOWER
March	12 x 12 in.	July to Oct.

Gaillardias, sometimes called Blanket Flowers, are natives of our own United States from the Ozarks south to the Gulf of Mexico. Germination is relatively slow (up to three weeks) but once up the plants come along quickly, flowering in 9 to 10 weeks. They're useful as bedding plants and provide a good source of cut flowers throughout the summer.



PICTA

- **Sunshine Double Mixture**. 2 ft. Fully double flowers about 2½ in. across are carried on strong stems 16 to 18 in. long. Attractive shades of wine-red, yellow and bicolor red and yellow. Good for summer cut flowers. Tr. pkt. (⅓ oz.), **30c**; ¼ oz., **80c**; 1 oz., **\$2.40**; 4 ozs., **\$7.00**.

TETRA

- **Red Giant**. 2 ft. 2½ inch single flowers of solid, bright coppery red are produced in abundance on vigorous, bushy plants. Tr. pkt. (⅓ oz.), **40c**; ¼ oz., **\$1.20**; 1 oz., **\$3.60**.

PERENNIAL (G. grandiflorum) 9500 S. 2-3 weeks 65-75°

SOW	SPACE	FLOWER
Feb.	12-15 in.	Late summer & following year.

The comments concerning germination for the Annual Gaillardias also apply here. Perennial Gaillardias do best in full sun and in light, sandy soil. They do not succeed in cold, heavy soils which are poorly drained. They are best treated as biennials since many will not survive the second winter. The taller types make excellent cut flowers.

GRANDIFLORA

- **Dazzler**. The standard fine cutting strain. Golden yellow with maroon center.
 - **Monarch Strain**. A superior mixture of large, full-petaled flowers in various red and yellow combinations.
 - **Burgundy**. Deep shade of wine-red.
 - **Goblin**. Forms very attractive, compact plants with red and yellow bicolored flowers. Quite free flowering.
- Prices** above 4, each: tr. pkt. (⅓ oz.), **30c**; ¼ oz., **80c**; 1 oz., **\$2.40**; 4 ozs., **\$7.25**.
- Gas Plant**. See Dictamnus, page 23.

GAZANIA

ANNUAL (G. splendens)

12,000 S. 3 weeks 55°

Splendens Grandiflora Mixture. 8 in. Daisy-like flowers, mostly orange, with shades of yellow and white. The vigorous plants are constantly in bloom. Stands hot, dry weather well. Tr. pkt. (⅓ oz.), **65c**; ¼ oz., **\$2.00**; 1 oz., **\$6.00**.

GERANIUM

ANNUAL (Pelargonium zonale hyb.) 6000 S. 4-6 weeks 55-65°

Easily grown from seed, but should be sown early since 6 or 7 months is required for blooms.

Florist Mixture. Extra large flowered singles. American-grown. 500 seeds, **\$1.75**; 2000 seeds, **\$5.25**.

Zonale. A single mixture of white, pink, salmon and red. Tr. pkt. (⅓ oz.), **95c**; ¼ oz., **\$2.75**; 1 oz., **\$8.00**; 4 ozs., **\$24.00**.



"GROWER TALKS"

The only commercial monthly publication which is devoted **exclusively to flower growing**. Yours for 1 year for **\$1.25**; 3 years for **\$3.50**.

Binder for 24 issues of **GROWER TALKS, \$2.50**

Grow Foliage Plants from Ball Seed



ADIANTUM
(Maidenhair Fern)

ADIANTUM (Maidenhair Fern)

Ocean Spray. A sturdier growing form of this popular Fern. Fine for pots and combinations or for cutting, and easily grown from seed (spores). Full growing instructions with each order. Tr. pkt., **\$1.75.**

ASPARAGUS

Falcatus. Deep green, wide leaves; slow growing. Fine for hanging basket and pot work. Fronds may be cut for arrangements. Young plants resemble a Pteris fern.

100 seeds, **\$1.25**; 250 seeds, **\$3.00**; 1000 seeds, **\$9.00.**

Asparagus Sprengeri and Plumosus, see page 9.

DRACAENA See page 23.

JACARANDA

ANNUAL

7 days 65°

Mimosaefolia. A foliage plant of value for its graceful fern-like leaves — useful in all stages of growth and easy to grow from seed. In conservatories, will develop into trees with beautiful violet flowers, as seen outdoors in southern California. 100 seeds, **60c**; 500 seeds, **\$2.50.**

PALM

ANNUAL (Collinia elegans)

200 S. 3-6 months 70°

Neantha Bella (Chamaedorea elegans). A miniature Palm from South America. Dwarf and graceful, and grows more rapidly than Kentia after germination. Requires less than 5 months at 70°. Use a friable sandy loam mixed with peat in potting.

1 oz. (about 200 seeds), **\$1.50**; 4 ozs. (about 800 seeds), **\$5.00.**

NEPHTHYTIS

Emerald Gem. Green form of this very popular and tough dish garden item. An inexpensive pot plant. Because seed is very perishable, orders will be accumulated and shipped fresh at our convenience.

250 seeds, **\$5.00**; 500 seeds, **\$9.00**; 1000 seeds, **\$16.00.**

PHILODENDRON

Selloum. Attractive cup-shaped, hand-like leaves. Makes very large specimen plants. Germinates easily.

100 seeds, **\$1.40**; 250 seeds, **\$3.00**; 1000 seeds **\$9.00**; 5000 seeds, **\$35.00.**

PTERIS

Argyreaa (The Silver Fern). Easy to grow, attractive dish garden variety. Sowing directions with each package. Tr. pkt., **\$1.75.**

SCHEFFLERA (Special Compact Hawaiian Strain)

ANNUAL (S. actinophylla)

4000 S. 65-70°

Actinophylla. This popular foliage plant is easy to grow from seed which will germinate in about 2 weeks in a 65-70° temperature. Use a loose, sandy, well drained medium for sowing, covering seeds 1/8 inch deep. Little or no fertilizer is recommended for the first 8 weeks, and water sparingly after plants are about an inch high.

250 seeds, **90c**; 1 oz., **\$5.00**; 4 ozs., **\$14.00**; 1/2 lb., **\$27.00**; 1 lb., **\$48.00.**

FOR OTHER FOLIAGE PLANTS, SEE INDEX



ASPARAGUS
Falcatus



JACARANDA



PALM
Neantha Bella



NEPHTHYTIS
Emerald Gem



SCHEFFLERA
Actinophylla

GERBERA. See page 28.

GESNERIA

ANNUAL (G. macrantha)

650,000 S. 3 weeks 65-75°

Macrantha. The Gloxinia-like leaves of this attractive pot plant are crowned with an upright central stem bearing many slender, tubular, brilliant scarlet flowers. Sow January to March for late fall and Christmas plants. Keep shaded during summer and 60° in winter. Tr. pkt., **\$1.75.**

The dot (•) indicates varieties most dependably satisfactory in our experience and observation.

GEUM

PERENNIAL (G. chilense)

7000 S. 3-4 weeks 65-75°

The following two provide nice cut-flower material and are perfectly winter hardy with some protection.

Lady Stratheden. 2 ft. Double golden yellow.

Mrs. Bradshaw. 2 ft. Double glowing red.

Prices above 2, each: tr. pkt. (1/8 oz.) **45c**; 1/4 oz., **\$1.25**; 1 oz., **\$3.60**; 4 ozs., **\$10.50.**

GILIA

ANNUAL (Leptosiphon lutea)

133,000 S. 10-14 days 60-70°

Carpet of Jewels. An early flowering, beautiful ground cover. Tiny flowers in a bright mixture. Admired here on our last Field Day. Tr. pkt. (1/8 oz.), **30c**; 1/4 oz., **80c**; 1 oz., **\$2.40.**

GERBERA (Transvaal Daisy)

GERBERA DUPLEX MIXTURE



ANNUAL (G. Jamesoni)

8000 S. 2-3 weeks 65-75°

SOW
Jan.-Feb.

SPACE
12 x 12 in.

FLOWER
Sept. to May

This native of Africa and Asia, often called Transvaal Daisy can be successfully grown as a greenhouse cut flower crop. Seeds should be sown $\frac{1}{4}$ to $\frac{1}{2}$ in. apart and pricked off in 3 in. Jiffy-Pots in 4-6 weeks. At this time the weakest $\frac{1}{3}$ of the seedlings should be discarded. Further selection should be made when plants are benched in June. The crop should be grown at a steady 60° nights.

Duplex Mixture. 2-2½ ft. This splendid strain produces large, 5 inch flowers with twice as many petals as the ordinary single type. All colors except blue are represented, with flowers being carried on long strong stems. Pictured above.
100 seeds, **65c**; 500 seeds, **\$3.00**; 1000 seeds, **\$5.50**;
5000 seeds, **\$25.00**.

GLOXINIAS

ANNUAL (Sinningia speciosa)

800,000 S. 2-3 weeks 65-75°



GLOXINIAS (Cont'd)

SOW
See below

FLOWER
See below

These showy pot plants from Brazil have increased tremendously in popularity in recent years, and can be had for almost any season when grown from seed. Sow Dec.-early Jan. for June flowering; June 1 for Christmas and July 15 for Valentine's Day. Prick off seedlings into 2¼ inch Jiffy-Pots, then into 4 in. pots. Potting mix 1/3 soil, 1/3 sand, 1/3 peat. Grow at 65-70° with light shade in summer.

Trade Packets contain over 1000 seeds.

- **Panzer Scarlet.** Originator's seed. This deep, bright velvety red is the most popular seed-grown Gloxinia. The originator's strain has been reselected and is now offered with assurance that it has no peer in commercial Gloxinia seed strains. Full cultural directions sent with each packet. Pictured below, left. Tr. pkt., **\$3.00**; 5 tr. pkts., **\$13.50**.

Marbott's Pink. This excellent pink Gloxinia should not be confused with the darker rose shades.
Tr. pkt., **\$3.00**; 5 tr. pkts., **\$13.50**.

Tigered and Spotted. Very attractive mixture of colors.
Tr. pkt., **\$1.25**; 6 pkts., **\$6.00**.

- **Formula Mixture.** Made up of choice named separate color varieties. All colors are represented, including bicolors and spotted types. Tr. pkt., **\$1.25**; 6 pkts., **\$6.00**.

Emperor Frederick
(Scarlet & White)

Etoile de Feu (Scarlet)

Emperor William
(Violet & White)

Mont Blanc (White)

Prince Albert (Violet)

Queen Wilhelmina (Dark Pink)

Prices above 6, each: tr. pkt., **\$1.25**.

COLLECTION of 1 tr. pkt. each above 6 separate colors, **\$6.75**.

DOUBLE GLOXINIAS FROM SEED

Royal Red. Bright, luminous red, about 50% true double flowers. Balance large-flowered singles.
 $\frac{1}{2}$ tr. pkt., **\$2.50**; tr. pkt. (1000 seeds), **\$4.50**.

IMPORTED FLEXIBLE-LEAVED STRAIN

This new strain is reported by its originator to have softer, more flexible leaves than the ordinary type, permitting it to be handled and packed without danger of leaf breakage.

Blood Red

Blue

Prices above 2, each: tr. pkt., **\$2.00**; 1/128 oz., **\$6.00**.

Gloriosa Daisy. See Rudbeckia, page 56.

GOMPHRENA (Globe Amaranth)

ANNUAL (G. globosa)

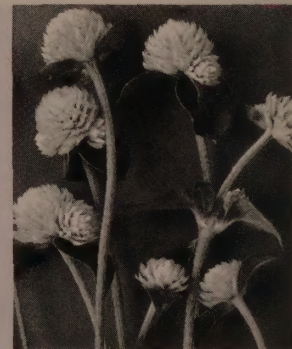
5500 S. 2-3 weeks 65-75°

SOW
March

SPACE
6-10 in.

FLOWER
July to frost

Globe Amaranth is the popular name of this heat loving plant from the tropical sections of the Old World. Both dwarf and tall forms are available. The latter are useful for cutting, and may be dried if not picked until well matured. The dwarf varieties are excellent for borders and combination boxes. They need full sun and a well-drained location.



- **Rubra.** 18 in. One inch, ball-shaped flowers of reddish purple. Tr. pkt. ($\frac{1}{8}$ oz.), **30c**; $\frac{1}{4}$ oz., **50c**; 1 oz., **\$1.50**.

Mixture of purple, silvery white, pink and orange.
Tr. pkt. ($\frac{1}{8}$ oz.), **30c**; $\frac{1}{4}$ oz., **50c**; 1 oz., **\$1.50**.

◀ **GLOXINIA PANZER SCARLET**

GOMPHRENA (Cont'd)

- **Buddy.** 9 in. Fairly dwarf plants with small, ball-shaped flowers of bright reddish purple. This is the true dwarf strain. Fine for bedding, pot plants or combination boxes. Tr. pkt. (1/8 oz.), **60c**; 1/4 oz., **\$1.00**; 1 oz., **\$3.00**.

Cissy. 9 in. The same dwarf, compact habit of growth as Buddy, but with silvery white flowers.
Tr. pkt. (1/8 oz.), **60c**; 1/4 oz., **\$1.00**; 1 oz., **\$3.00**.

GOURDS, ORNAMENTAL

ANNUAL 500 S. 2-3 weeks 65-75°

SMALL VARIETIES. All are easily grown on trellises and, when properly dried and varnished, last indefinitely.

Spoon. Orange and green fruits with long, slender necks.

Warted Types, Mixture. Not over 4 in. in diameter.

Small Varieties, Mixture. Attractive assortment.

Prices above 3, each: 1/4 oz., **35c**; 1 oz., **90c**; 4 ozs., **\$2.70**.
See page 80 for Halloween Pumpkins.

GRASS, ORNAMENTAL

ANNUAL (*Pennisetum ruppelianum*) 14,000 S. 30 days 65°

Pennisetum ruppelianum (Fountain Grass). 3 to 4 ft. Long, graceful, purple sprays. A very striking background plant. Sow in January-February for spring bedding sales.

Tr. pkt. (1/8 oz.), **35c**; 1/4 oz., **\$1.00**; 1 oz., **\$3.00**; 4 ozs., **\$9.00**.

GREVILLEA

ANNUAL (*G. robusta*) 3000 S. 2-3 weeks 65-75°

Robusta (Australian Silk Oak). Good foliage plant. Stands heat well, tolerates sun and shade, holds foliage. August and September sowings grown at 60° produce good 2 1/4 inch pots for winter sales. Tr. pkt. (1/8 oz.), **75c**; 1/4 oz., **\$1.35**; 1 oz., **\$4.00**; 4 ozs., **\$12.00**; 1 lb., **\$45.00**.

GYPSOPHILA

ANNUAL (*G. elegans*) 24,000 S. 2-3 weeks 65-75°

SOW	SPACE	FLOWER
Mar.-Apr.	9-12 in.	June to Oct.

This annual form of "Baby's Breath" is widely used as filler material in floral arrangements. It is native to the lime bearing, alkaline soils of Europe and Asia. Successive sowings will give continuous flowering throughout the summer. For greenhouse forcing space 3-4 in. apart in 4 in. deep flats. Sowings made from Dec. to Apr. will flower in about 3 months.



- **Covent Garden Market.** A very excellent strain with large and full-petaled white flowers, about 15% of which have 6 to 8 petals. 1 oz., **30c**; 4 ozs., **75c**; 1 lb., **\$2.50**; 5 lbs., **\$10.00**.

PERENNIAL (*G. species*) 34,000 S. 1-2 weeks 65-75°
Valuable for outdoor summer cutting; easily and economically grown.

Pacifica. 3 ft. Starry pink flowers in September and October. Tr. pkt. (1/8 oz.), **40c**; 1/4 oz., **\$1.25**; 1 oz., **\$3.75**.

PANICULATA (Baby's Breath). The regular white hardy Gypsophila. Note that double grafted varieties like Bristol Fairy are not available from seed.

- **Double Snow Flake.** 3 ft. An improved double hardy Gypsophila. About 50% are double flowering plants. Tr. pkt. (1/8 oz.), **50c**; 1/4 oz., **\$1.50**; 1 oz., **\$5.00**.

HELIANTHEMUM (Sun Rose)

PERENNIAL (*H. nummularium*) 15,000 S. 2-3 weeks 65-75°

Mutabile. 8 to 10 in. Very attractive, dwarf, evergreen rock plants completely covered with blooms in mixed colors during July and August.

Tr. pkt. (1/8 oz.), **35c**; 1/4 oz., **75c**; 1 oz., **\$2.00**.

HELIANTHUS (Sunflower)

ANNUAL (*H. annuus*) 650 S. 2-3 weeks 65-75°

- **Sungold.** 4 to 5 ft. Practically 100% fully double, golden yellow Chrysanthemum-like flowers about 4 in. across. Makes a good cut flower. Sow outdoors in May for August blooming. 1/4 oz., **40c**; 1 oz., **\$1.20**; 4 ozs., **\$4.00**.

HELICHRYSUM (Everlasting)

ANNUAL (*H. bracteatum monstrosum*) 36,000 S. 2-3 weeks 65-75°

The most popular double Strawflower. Widely used for drying.

Formula Mixture. All colors.

Tr. pkt. (1/8 oz.), **30c**; 1/4 oz., **50c**; 1 oz., **\$1.40**; 4 ozs., **\$4.20**.

HELIOTROPE

ANNUAL (*Valeriana officinalis*) 50,000 S. 3-4 weeks 65-75°

Heliotrope does best in heat and rich soil.

Dwarf Regale Mixture. 15 in. A fine, even strain with extra large, lavender-violet flower heads. Richly fragrant. Tr. pkt. (1/8 oz.), **40c**; 1/4 oz., **\$1.00**; 1 oz., **\$3.25**.

- **Marine.** 12 in. Excellent large flowered, deep violet. Tr. pkt. (1/8 oz.), **55c**; 1/4 oz., **\$1.60**; 1/2 oz., **\$4.80**.

HELLEBORUS

PERENNIAL (*H. niger*) 3600 S. Frost germinator

Must be exposed to freezing temperatures for normal germination.

Choice mixture. 1 1/2 to 2 ft. Large flowered, white, lavender and rose. Tr. pkt. (1/8 oz.), **\$1.00**; 1/4 oz., **\$2.70**; 1 oz., **\$8.00**.

HEUCHERA (Coral Bells)

PERENNIAL (*H. sanguinea*) 750,000 S. 2-3 weeks 65-75°

2 ft. Small, cup-shaped flowers borne in slender panicles.

Splendens. Crimson.

Mixture. Shades of red through rose to white.

Prices above 2, each: tr. pkt. (1/8 oz.), **75c**; 1/4 oz., **\$2.00**; 1/2 oz., **\$3.75**.

HIBISCUS

PERENNIAL (*H. species*) 7000 S. 2-3 weeks 65-75°

Large, showy, tropical flowers. Needs moisture.

- **Avalon.** 5 ft. This is an exceptional mixture of genuine F₂'s with colors ranging from blush-pink to bright red. The blooming period (early July to late September) is much longer and the flowers larger than the regular Mallow Marvels. Tr. pkt. (1/8 oz.), **60c**; 1/4 oz., **\$1.50**; 1 oz., **\$4.25**.

HOLLYHOCK

ANNUAL (*Althea rosea*) 2000 S. 2-3 weeks 70-80°

Plants should be Jiffy-Potted or banded early before tap roots grow down.

- **Indian Spring.** 4 to 5 ft. Starts to bloom 5 months from seed sowing and continues until frost. Semi-double, light pink and rose flowers are borne mostly on central spikes. Tr. pkt. (1/8 oz.), **45c**; 1/4 oz., **80c**; 1 oz., **\$2.40**.
- **Triumph Supreme.** Extra large, fully double flowers in unusual delicate art shades. Most blooms are attractively fringed. Best handled as an annual—if sown indoors in February and transplanted to the open in spring, all plants will flower nicely the same summer. Tr. pkt. (1/8 oz.), **55c**; 1/4 oz., **\$1.00**; 1 oz., **\$3.00**.

PERENNIAL (*Althea rosea*) 3000 S. 2-3 weeks 65-75°

6 to 8 ft. Popular and well-known perennial.

CHATER'S DOUBLE. The standard double.

Newport Pink	Scarlet	Deep Rose
Sulphur-Yellow	White	Mixture

Prices above 6, each: tr. pkt. (1/8 oz.), **45c**; 1/4 oz., **75c**; 1 oz., **\$2.00**; 4 ozs., **\$6.00**.

HUNNEMANNIA, IBERIS. See page 32.



Shade bulletin:

In spite of Oak wilt, Dutch Elm disease, etc., shade gardening problems and opportunities are becoming increasingly important to home owners. In annuals you may offer this “big three for shade” — Impatiens, Coleus and Begonias — with full confidence that your customers will realize neat controlled growth and continuous color from all of these subjects.

Impatiens "SULTANAS"

ANNUAL (I. Holstii and sultani)

S. See below 3-4 weeks 70-75°

SOW	SPACE	FLOWER
Jan.-Feb.	12 x 12 in.	July to Oct.

Sultanas, as Impatiens are sometimes called, are natives of Zanzibar and have increased tremendously in popularity in recent years. Not only are they among the finest of bedding plants for shady areas, but they make first class pot plants as well. They cover themselves with blooms of intense color that possess a luminous sheen seldom equaled in any bedding plant.

Transplant seedlings into 2¼ or 3 inch Jiffy-Pots or Paks for spring bedding sales or for combination use. For 4 inch blooming pot plants in Nov.-Dec. sow seed Aug. 1. The F₁ Hybrid varieties are recommended because of their faster growth rate and larger flower size.

For best results, sow seed as soon as possible after receiving it. Germinate in a minimum temperature of 70-75°, preferably in full light (no cover over flat), and keep uniformly moist. Allow 3 to 4 weeks for complete germination. This seed is very sensitive to low temperatures, lack of moisture and darkness.

DWARF. 6 to 8 inches. 60,000 S.

Dwarf Bright Rose. A luminous shade of deep rose. Compact and free flowering. Pictured at right.

Blaze (Scarlet Baby). Bright scarlet-orange with contrasting dark foliage. Dwarf, spreading growth.

Pinkie (Pink Baby). Large flowers of bright coral-rose with salmon cast. Refreshingly different color in dwarf Impatiens. Pictured at right.

Dwarf Bright Orange. Flat, spreading growth. This is a bright shade of orange. Similar to European strains of **Beauty of Klettgau**, but our trials indicate it is superior in uniform dwarf habit. Pictured at right.



**SWEET
SIXTEEN**

• DWARF MIXTURE

A Sweet Sixteen Selection for 1963. An excellent blend of dwarf varieties, including pink, rose, salmon, orange and red shades. Unsurpassed for shade bedding.

Prices above 5, each: tr. pkt. (1/128 oz.), \$1.10; ¼ oz., \$2.00; ½ oz., \$6.00; ¾ oz., \$11.00; 1 oz., \$18.00; 1½ oz., \$35.00; 2 oz., \$68.00.

TALL. 10-12 inches. 60,000 S.

Holsti Mixture. Bright mixture of pink, rose, salmon, orange, red, orchid and purple shades. Tr. pkt. (¼ oz.), 45¢; ½ oz., \$1.35; ¾ oz., \$4.00; 1 oz., \$7.00; 1½ oz., \$13.00.

F, HYBRID IMPATIENS

(Ball Orig. Seed) 44,000 S.

Salmon Jewel. Large flowers of bright clear salmon. Lighter in color than Dwarf Bright Orange. Pictured at right.

Red Jewel. Intense, deep cherry-red flowers against a background of dark green foliage. Pictured at right.

Pink Sprite. Pale apple-blossom pink flowers on compact plants. Tends to lighten under outdoor conditions.

Pixie White. The first absolutely snow-white Impatiens from seed. More difficult to germinate than other Impatiens. Pictured at right.

Royal Jewel. Another Ball origination. Distinctly different color, royal purple. Pictured at right.

F₁ Hybrid Mixture (New). Mixture of red, pink, white, and salmon.

Prices above 6, each: tr. pkt. (1/128 oz.), \$2.50; ¼ oz., \$4.35; ½ oz., \$7.50; ¾ oz., \$13.50; 1 oz., \$25.65; 1½ oz., \$48.75; 2 oz., \$90.00; 3 oz., \$165.00.

Top to bottom: Red Jewel, Pinkie, Salmon Jewel, Pixie White, Dwarf Bright Rose, Dwarf Bright Orange, and Royal Jewel.

Ideal for your customers' shady spots — Impatiens, Begonias and Coleus. See page 13 for Begonias, Page 20 for Coleus.



HUNNEMANNIA (Bush Escholtzia)

ANNUAL (*H. fumariaefolia*) 8000 S. 2-3 weeks 65-75°

Sunlite. 2 ft. Brilliant yellow. Semi-double, cup-shaped flowers. Needs a sunny location.

Tr. pkt. (1/8 oz.), **45c**; 1/4 oz., **75c**; 1 oz., **\$2.00**.

IBERIS (Hardy Candytuft)

PERENNIAL (*I.* species) 11,500 S. 2-3 weeks 65-75°

Plants flower second season from seed.

Gibraltarica. 12 in. Large flowered lilac.

Tr. pkt. (1/8 oz.), **30c**; 1/4 oz., **50c**; 1 oz., **\$1.50**.

Sempervirens. 12 in. White flowers in late May. Needs ample moisture. Tr. pkt. (1/8 oz.), **50c**; 1/4 oz., **\$1.50**; 1 oz., **\$4.50**; 4 ozs., **\$13.50**; 1 lb., **\$40.00**.

IMPATIENS. See pages 30-31.

INCARVILLEA

PERENNIAL (*I.* species) 6000 S. 2 weeks 65-75°

Funnel-shaped flowers borne in terminal clusters.

Grandiflora Brevipes. 18 in. Brilliant crimson-rose flowers.

Delavayi. 2 ft. large, Gloxinia-like rosy purple flowers.

Prices above 2, each: tr. pkt. (1/8 oz.), **80c**; 1/4 oz., **\$2.15**; 1 oz., **\$6.25**.

IPOMOEA. See Morning Glory and Moonflower, page 37.

IRIS

PERENNIAL (*I.* species) 7000 S. Frost germinator

Must be exposed to freezing temperatures for normal germination. Plants bloom second season from seed.

Dichotoma (Vesper Iris). 2 ft. Assorted colors; fragrant.

Kaempferi (Japanese Iris). 2 ft. A wide variety of colors with many doubles.

Prices above 2, each: tr. pkt. (1/8 oz.), **60c**; 1/4 oz., **\$1.50**; 1 oz., **\$4.25**.

KALANCHOE

ANNUAL (*K. blossfeldiana*) S. See below 1-2 weeks 65-75°

Because of its showiness and ability to hold up well in the home, this plant is becoming more widely used each year. While they flower normally in January and February from a January sowing, they may be had in bloom for Christmas if shaded with black cloth for about 4 weeks starting September 1. April sowings produce good 3's for the following winter. Need 60° minimum nights, good air circulation. Trade packets contain about 4000 seeds.



KALANCHOE VULCAN

KALANCHOE (Cont'd).

• **Brilliant Star.** 1,000,000 S. 18 in. A fine pot plant producing flowers three times the size of the common varieties and of a brighter, fiery red color. Also valuable for cutting.

Tr. pkt., **\$1.00**; 1/128 oz., **\$2.10**; 1/4 oz., **\$3.85**; 1/2 oz., **\$7.00**.

Tom Thumb. 2,500,000 S. 8 in. Perfectly rounded, symmetrical plants literally covered with small bright scarlet flowers.

Tr. pkt., **\$1.00**; 1/128 oz., **\$3.00**; 1/4 oz., **\$5.50**; 1/2 oz., **\$10.00**.

• **Vulcan.** 2,500,000 S. 8 in. This variety is a definite improvement over Tom Thumb. The flowers are somewhat larger and brighter red in color, and the growth is sturdier. Most growers prefer this to Tom Thumb. Pictured below left.

Tr. pkt., **\$1.25**; 1/128 oz., **\$3.50**; 1/4 oz., **\$6.50**; 1/2 oz., **\$12.00**; 1/8 oz., **\$20.00**; 1/8 oz., **\$36.00**.

KOCHIA (Summer Cypress)

ANNUAL (*K. Childsii*) 45,000 S. 1-2 weeks 65-75°

Childsii. 2 ft. Symmetrical oval plants stay green throughout the entire season. Used for summer hedges.

Tr. pkt. (1/4 oz.), **25c**; 1 oz., **60c**; 4 ozs., **\$1.80**.

LANTANA

ANNUAL (*L. camara*) 1300 S. 6-7 weeks 65-75°

Very showy. One of the most satisfactory bedding subjects for areas where summer heat is excessive. Must be sown early with bottom heat.

Dwarf Mixture. 16 in. All colors.

Tr. pkt. (1/8 oz.), **60c**; 1/4 oz., **\$1.00**; 1 oz., **\$3.00**.

LARKSPUR

ANNUAL (*Delphinium ajacis*) 8000 S. 3-4 weeks 55-65°

For Early Summer Cut Flowers Outdoors: If a sowing is made outdoors by growers in the near South 6 or 7 weeks before the ground freezes; plants well enough established to winter over in all except the most severe seasons can be produced. In the North sowing should be done as early in the spring as the soil can be worked — just as soon as the frost is out of the ground. Figure on 2 lbs. of seed to sow an acre or 1 oz. for 600 to 700 ft. of row, if seeds are sown about 1 inch apart. Height outdoors 2 to 3 ft.

Under Glass — Spring Flowering: For indoor growing, Larkspur is a nice crop to follow late Mums. Well started 3-in. Jiffy-Potted plants should be ready, and are produced by a September to January sowing. Space at least 12 x 12 in. on ground; 10 x 10 in. on raised beds. Maintain night temperature of not over 50°. Height indoors 4 to 5 ft.

Germination: Larkspur seed doesn't germinate well in high temperatures. If it must be sown when hot, better do so in flats set under a bench or in a cool shed. It requires 2 to 3 weeks to come through, sometimes longer.

PLEASE NOTE: Pound price applies to 1/2 pound or more of one variety only — not allowed for several varieties totaling 1 pound. All varieties listed below are base branching except the Hyacinth Flowered.

8 BEST

This list is based on our regular flowering trials.

- **Salmon Supreme.** Extra fine, medium salmon-rose.
- **Dark Blue Supreme.** The best deep violet-blue.
- **Lilac Supreme.** The best clear lavender; no orchid shading.
- **White Supreme.** The most vigorous white in our trials.
- **Regal Salmon-Pink.** A shade lighter than Salmon Supreme.
- **Regal Carmine.** Bright carmine-rose.

• **Light Blue Supreme (New).** An excellent light blue.

• **Brilliant Rose.** Deepest rose of all.

• **8 Best Mixture.** Blended by formula from these 8 varieties.

Prices above 9, each: tr. pkt. (1/4 oz.), **60c**; 1/2 oz., **\$1.00**; 1 oz., **\$1.75**; 4 ozs., **\$5.00**; 1 lb., **\$15.00**.

COLLECTION: Tr. pkt. each of above 8 named varieties, **\$4.25**.

HYACINTH-FLOWERED. Produces one long non-branching spike. Early and non shattering. Sow November-December for April cut or directly outdoors as soon as frost is out of the ground. Space about 4 x 5 inches.

Dark Blue

White

Bright Rose

Lilac-Lavender

Pink

Mixture

Prices above 6, each: tr. pkt. (1/8 oz.), **55c**; 1/4 oz., **\$1.00**; 1 oz., **\$3.00**; 4 ozs., **\$10.00**.

LATHYRUS

PERENNIAL (L. latifolius) 500 S. 2-3 weeks 65-75°

LATIFOLIUS (Hardy or Everlasting Sweet Pea). 7 ft. Abundant source of short-stemmed flowers.

Mixture. Tr. pkt. (¼ oz.), **65c**; 1 oz., **\$1.90**.

LAVANDULA (Lavender)

PERENNIAL (L. vera) 32,000 S. 2-3 weeks 65-75°

Munstead Strain. 12 in. Freely produces large, sweet-scented flowers a month earlier than the common Lavender.

Tr. pkt. (⅓ oz.), **55c**; ¼ oz., **\$1.50**; 1 oz., **\$4.25**.

LIATRIS (Gayfeather)

PERENNIAL (L. species) 9500 S. 3-4 weeks 65-75°

Excellent cut flowers with long, decorative, bold spikes. All are easily grown. 3 to 5 ft.

Pycnostachya. Extra long-stemmed with long, 15 to 18-inch flower spikes of rosy purple. Finest cut-flower kind.

Tr. pkt. (⅓ oz.), **35c**; ¼ oz., **\$1.00**; 1 oz., **\$3.00**.

LILIES (Lilium)

PERENNIAL (Lilium species) 8000 S. 3-5 weeks 65-75°

- **White Queen** (Longiflorum). This is the largest and finest seed propagated Lily we know of. Produces quality greenhouse flowers in 16-18 months. Pure white.

Tr. pkt. (⅓ oz.), **\$1.80**; ⅛ oz., **\$5.25**; ¼ oz., **\$10.00**.

Tenuifolium (Coral Lily). Freely produces medium sized coral-red flowers 18-20 in. tall. May flowering.

Tr. pkt. (⅓ oz.), **50c**; ¼ oz., **\$1.50**; 1 oz., **\$4.50**.

LINARIA (Miniature Snapdragon)

ANNUAL (L. maroccana) 600,000 S. 2-3 weeks 65-75°

Northern Lights. 18 in. An improved taller growing Linaria containing many bright new shades.

Tr. pkt. (⅓ oz.), **40c**; ¼ oz., **\$1.10**; 1 oz., **\$3.25**.

LINUM (Flax)

PERENNIAL (L. species) 8500 S. 3-4 weeks 65-75°

Perenne. 2 ft. Attractive blue flower on slender stems.

Tr. pkt. (¼ oz.), **35c**; 1 oz., **90c**; 4 ozs., **\$2.50**.

Flavum Compactum. 8 in. Golden yellow flowers with dark green foliage. Ideal for rock gardens.

Tr. pkt. (⅓ oz.), **50c**; ¼ oz., **\$1.50**; 1 oz., **\$4.50**.

LOBELIA

ANNUAL (L. erinus) 700,000 S. 2-3 weeks 65-75°

SOW	SPACE	FLOWER
Feb.-Mar.	9 x 9 in.	June to Oct.

These dainty and sparkling plants are natives of South Africa, and some varieties provide the intense, clear blue coloring which is lacking in most annuals. In sowing, do so thinly and do not cover the seed. If plants get leggy, they should be pinched back. They do best in semi-shade and are useful for borders, rock gardens and in combinations. For the latter purpose seed may be sown in Dec. or Jan.

COMPACTA. 6 in. Of dwarf, compact habit. Good edger.

- **Blue Gown.** Free flowering deep blue. Very fine.

Cambridge Blue. Very dwarf, light blue.

Mrs. Clibran Imp. Deep blue; white eye and light foliage.

Rosamond. Rich violet-rose with white eye.

White Lady. Clear glistening white.

Prices above 5, each: tr. pkt. (⅓ oz.), **30c**; ¼ oz., **\$1.25**; 1 oz., **\$3.75**.

Heavenly (New). 8 in. A very attractive deep sky-blue. Flowers are twice the size of Crystal Palace. Plants are very compact but erect. Very vigorous and free flowering. Ideal for shady locations.

Tr. pkt. (⅓ oz.), **80c**; ⅓ oz., **\$2.35**; ¼ oz., **\$7.00**; 1 oz., **\$21.00**.

LOBELIA (Cont'd)



- **Crystal Palace.** Very dwarf deep blue with dark bronzy green foliage. A fine variety. Pictured at right. Tr. pkt. (⅓ oz.), **30c**; ¼ oz., **\$1.25**; 1 oz., **\$3.75**.

PENDULA. Of trailing or pendulous habit.

Hamburgia. Sky-blue with white eye; dark green foliage.

Sapphire. Deep blue with white eye. Light green foliage.

Prices above 2, each: tr. pkt. (⅓ oz.), **25c**; ¼ oz., **\$1.20**; 1 oz., **\$3.60**.

PERENNIAL (L. cardinalis) 725,000 S. 3-4 weeks 65-75°

Cardinalis (Cardinal Flower). 3 ft. Bright cardinal-red.

Tr. pkt. (⅓ oz.), **60c**; ⅓ oz., **\$1.50**.

LOVE APPLE

ANNUAL (Solanum aculeatissimum) 10,400 S. 2 weeks 65-75°

Branches of these colorful plants are widely used for floral arrangements when dried. Easily grown outdoors.

Orange Fruited. 2 ft. Long, thorny branches of bright orange fruits about 1½ inches across.

Tr. pkt. (⅓ oz.), **50c**; ⅓ oz., **\$1.50**; ¼ oz., **\$2.75**.

See also Cherries, Christmas, page 18; Peppers, Christmas, page 39.

LUNARIA (Honesty or Money Plant)

PERENNIAL (L. biennis) 1500 S. 2-3 weeks 65-75°

Mixture. 2 ft. Purple and white flowers producing branches of flat, circular, papery seed pods which are used in dried bouquets. Tr. pkt. (¼ oz.), **50c**; 1 oz., **\$1.50**; 4 ozs., **\$4.50**.

LUPINE (Lupinus)

ANNUAL (L. Hartwegi) 1300 S. 2-3 weeks 65-75°

GIANT KING (Improved Hartwegi). 3 ft. Nice May cut-flower crop in 3-inch pots from a January sowing spaced close, one spike to a plant. Sow Aug.-Sept., space 8 x 8 inches on raised bench for March-April cut flowers.

- **Special Florist Mixture.** Tr. pkt. (¼ oz.), **40c**; 1 oz., **\$1.00**; 4 ozs., **\$3.00**.

PERENNIAL (L. polyphyllus) 1000 S. 3-4 weeks 65-75°

Hardy Lupine. 4 ft. Fine for cutting. Requires a well drained location and thrives best in cool climate.

Harkness Regale Mixture. The standard fine mixture. ¼ oz., **40c**; 1 oz., **\$1.10**; 4 ozs., **\$3.25**.

- **Russell Strain**

Long, closely set spikes of extra large florets in rich self colors and unusual bicolors. Straight colors from this famous strain are offered below.

RESELECTED STOCK (Originator's packets): **Mixture.** 65 seeds, **65c**; 150 seeds, **\$1.25**; 350 seeds, **\$2.50**.

REGULAR SEED: **Mixture.**

Tr. pkt. (½ oz.), **45c**; ¼ oz., **80c**; 1 oz., **\$2.25**; 4 ozs., **\$6.50**.

Blue Shades **Red Shades** **Yellow Shades**

Rose and Pink Shades **White and Cream Shades**

Prices above 5, each: tr. pkt. (½ oz.), **65c**; ¼ oz., **\$1.15**; 1 oz., **\$3.25**; 4 ozs., **\$9.50**.

LYCHNIS. See page 36.

Dwarf Marigolds

ANNUAL (Tagetes Patula)

9000 S. 1-2 weeks 65-75°

Even though all Marigolds, Dwarf and Tall, are natives of Mexico, they came to this country via Europe. Padres accompanying Cortez to Mexico sent seed to France and Africa. They were called "Marigolds" because of their color, and given the names "French" and "African" to differentiate them from the native European Marigolds — the Calendulas.

Dwarf Marigolds are among the most showy and useful of all

plants for bedding and combination work. They're easy to grow and relatively free of disease and insect pests. Almost every home gardener likes them and has "good luck" with them, so be sure to grow plenty for your bedding plant trade. To have blooming plants for "Pak" or flat sales, sow about 8 weeks before your selling season starts. Tr. pkts. contain 1/8 oz. unless noted otherwise.

6 BEST FOR BEDDING

- **Spry.** 10 in. Our most popular Dwarf Marigold. Prized for its brightly contrasting golden yellow Anemone crest and deep rich mahogany guard petals. Dwarf and free flowering.
- **Ball Dwarf Harmony.** 10 in. Similar to Spry, except for color which is bright orange rather than yellow. Very rich effective color combination — deep maroon guard petals.
- **Butterball.** 8 in. Light butter-yellow petals tipped wine-red. Guard petals also wine-red. Compact habit, and fully double.
- **Lemon Drop.** 9 in. Dwarf, compact plants with medium small, fully double, lemon-yellow flowers. Considered by many an improvement over Yellow Pygmy.
- **Sunkist.** 9 in. Dwarf and compact; deep golden orange double flowers.
- **Rusty Red.** 13 in. Large, rust-red, fully double flowers, 2 inches across.
- **Best Dwarf Mixture.** Balanced mixture of the above except Rusty Red.

Prices above 7, each: tr. pkt., **40c**; 1/4 oz., **70c**; 1 oz., **\$2.00**; 4 ozs., **\$6.00**.

• PETITES

Pictured opposite page. An extra dwarf, fully double strain of Marigolds with plants so dense and free flowering that the foliage is scarcely visible. Its extra early blooming habit makes it ideal for Market-Pak or flat sales. Grows about 6 in. tall and 10 in. wide. Flowers are 1 to 1 1/4 inches in diameter.

Petite Orange. Orange flowers.

Petite Yellow. Strong yellow.

Petite Gold. Between Orange and Yellow in color.

Petite Harmony. Golden Anemone crest with deep mahogany guard petals.

Petite Spry (New). Golden yellow with maroon collar.

Prices above 5, each: tr. pkt., **55c**; 1/4 oz., **\$1.00**; 1 oz., **\$3.00**; 4 ozs., **\$9.00**.

• PETITE MIXTURE

A Sweet Sixteen Selection for 1963. All of the above varieties blended by formula.

Tr. pkt., **55c**; 1/4 oz., **\$1.00**; 1 oz., **\$3.00**; 4 ozs., **\$9.00**.

CUPIDS

Extremely uniform, these compact, odorless, bushy Marigolds produce 2 1/2-inch Mum-like blooms on dwarf plants. Cupids reach 10 in. in open beds, but will bloom at a height of 4 to 6 in. in 3-in. pots. Pictured at right.

- **Cupid Orange.** Bright orange.
- **Cupid Yellow.** Cream-yellow.
- **Cupid Gold.** Midway between Cupid Yellow and Orange in color.
- **Cupid Mixture.**

Prices above 4, each: tr. pkt. (1/8 oz.), **60c**; 1/4 oz., **\$1.75**; 1 oz., **\$5.00**.

OTHER DWARF DOUBLES

- **Color Magic.** 10 in. Bushy growing plants, similar to the popular Spry, but with fully double, 1 1/2-inch flowers in rich shades of yellow and orange irregularly marked dark red. Color changes as season progresses. Orig. Seed. Tr. pkt., **40c**; 1/4 oz., **75c**; 1 oz., **\$2.25**; 4 ozs., **\$6.75**.
- **Brownie Scout.** 8 in. Dwarf double, French type, gold with brown flecked base. The U.S. Council of Girl Scouts selected this for their anniversary flower in 1962. Tr. pkt. (1/8 oz.), **35c**; 1/4 oz., **\$1.00**; 1 oz., **\$3.00**; 4 ozs., **\$9.00**.
- **Spun Gold.** 12 in. Illus. opposite page. Erect, bushy plants bearing a multitude of double, incurved 3-inch flowers of bright, golden yellow. Similar to the Cupid types but somewhat earlier, and blooms more profusely. Tr. pkt. (1/8 oz.), **65c**; 1/4 oz., **\$2.00**; 1 oz., **\$6.00**; 4 ozs., **\$18.00**.

Harmony. 14 in. Attractive Anemone type flowers; orange crest and maroon guard petals.

Pot O'Gold. 15 in. Deep orange. Large flowers loosely formed with full centers and broad, overlapping petals. Flowers continuously in warmest weather.

Primrose. 12 in. Dwarf plants with fully double flowers an inch in diameter. Color is a rich golden yellow.

- **Scarlet Glow.** 12 in. Bright bronzy red, double flowers 1 1/2 to 2 inches across are borne on dwarf plants.

Tangerine. 13 in. 2 in. double flowers of bright tangerine-orange.

Yellow Pygmy. See Lemon Drop.

Dwarf French Double Mixture. 12 in. Medium dwarf sorts.

Prices above 7, each: tr. pkt. **40c**; 1/4 oz., **70c**; 1 oz., **\$2.00**; 4 ozs., **\$6.00**.

The dot (•) indicates varieties most dependably satisfactory in our experience and observation.



bedding or French



CUPID MARIGOLD



MARIGOLD SPUN GOLD WITH AGERATUM BLUE MINK



DWARF SINGLE VARIETIES

- **Flash.** 14 in. Mahogany flowers, golden yellow margins.
 - **Naughty Marietta.** 16 in. Semi-dwarf. Freely produces 2-inch, single, golden yellow flowers, with dark red eye.
 - **Dainty Marietta.** 12 in. Flowers similar to the popular Naughty Marietta, freely produced on extra dwarf, compact plants.
 - **Sunny.** Similar to Naughty Marietta, clear yellow.
- Prices** above 4, each: tr. pkt., 35c; 1/4 oz., 65c; 1 oz., \$1.80; 4 ozs., \$5.40.

DWARF BUSH

- **Goldilocks (Lulu).** 9 in. Dense, rounded, free flowering plants, fine, lacy foliage. Small, lemon-yellow flowers.
 - **Sunburst (Ursula).** 9 in. Same as Goldilocks, flowers are golden yellow.
- Prices** above 2, each: tr. pkt. (1/8 oz.), 40c; 1/4 oz., \$1.20; 1 oz., \$3.60.

MARIGOLD PETITE ►



Tall Marigolds-for cutting

ANNUAL (Tagetes erecta) 10,000 S. 1-2 weeks 65-75°

Bedding plant growers are finding an increasing demand by home gardeners for the taller Marigolds for summer bouquets and background plantings. The F₁ Hybrids Toreador and Yellow Climax are exceptionally fine for this purpose. Sow about 6 weeks before selling season. For April-May single stemmed greenhouse cut flowers, sow Jan.-Feb., space about 4 x 5 inches and disbud to one flower. The All-Doubles are generally preferred for this use. Trade packets contain 1/8 oz. unless otherwise noted.

5 BEST FOR CUTTING

- **Ball Giant Orange.** 36 in. Similar in type to All-Double Orange but somewhat larger flowered and of a more uniform, deep bright orange color.
- **All-Double Orange.** 36 in. This belongs to the Fistulosa or large flowered, solid quilled-petal type. Nearly 100% double. An excellent, long-stemmed cut-flower strain.
- **All-Double Lemon.** 36 in. Identical to the above, but a clear lemon-yellow.
- **Gold Improved.** 30 in. Odorless. The popular Carnation-flowered intense orange. Excellent for greenhouse forcing.
- **Yellow Supreme.** 30 in. Odorless. Similar to Gold Improved but with flowers a rich creamy yellow.
- **Five Best Cutting Mixture.** Our own carefully compounded formula mixture of the foregoing varieties balanced according to their commercial value.

Prices above 6, each: tr. pkt., **40c**; 1/4 oz., **70c**; 1 oz., **\$2.00**; 4 ozs., **\$6.00**.

CHRYSANTHEMUM-FLOWERED TYPES

This class features almost perfect incurved, Chrysanthemum-like blooms. Exceptionally vigorous and free-branching in growth.

- **Glitters.** 32 in. Large, Chrysanthemum-like flowers of soft golden yellow on long, strong stems. Long blooming period.
- **Goldsmith** (Mission Giant). Large, light golden orange; Chrysanthemum-flowered.
- **Mammoth Mum.** 30 in. The largest of this type. Light sulphur-yellow.

Mission Giant Mixture. 18 in. A chrysanthemum-flowered mixture; large blooms.

Prices above 4, each: tr. pkt., **55c**; 1/4 oz., **\$1.00**; 1 oz., **\$3.00**; 4 ozs., **\$9.00**.

WINTER FLOWERING

Sow in late summer or early fall for plenty of winter cutting material.

- **Colorado Sunshine.** Double, 3 to 4 inch, butter-yellow blooms.
- **Lieb's Brown and Gold.** 30 in. 2 in. blooms of gold and dark red.

Prices above 2, each: tr. pkt. (1/8 oz.), **55c**; 1/4 oz., **\$1.60**; 1 oz., **\$4.65**.



CRACKERJACK MIXTURE

CARNATION-FLOWERED VARIETIES

Crackerjack Mixture. A Sweet Sixteen Selection for 1963. 42 in. A mixture of extra large, 100% double, Carnation-flowered blooms in shades of orange, gold and yellow. Very showy, and excellent for summer cutting. Pictured above.

Tr. pkt., **55c**; 1/4 oz., **\$1.00**; 1 oz., **\$3.00**; 4 ozs., **\$9.00**.

Man-in-the-Moon. 30 in. Fully double, Carnation-flowered, pale ivory-yellow. Blends well with darker colors.

Tr. pkt., **35c**; 1/4 oz., **60c**; 1 oz., **\$1.75**.

Odorless Carnation-Flowered Mixture. 30 in. Ranges in color from deep orange to light yellow. Carnation-flowered.

Tr. pkt., **30c**; 1/4 oz., **55c**; 1 oz., **\$1.65**; 4 ozs., **\$5.50**.

(F) HYBRID MARIGOLDS

These F₁ Hybrid varieties are more free flowering and vigorous than regular Marigolds, producing uniformly double flowers up to 5 inches across on sturdy plants. 30 in.

- **Toreador** (Imp. Orange Climax). Bright orange.
- **Yellow Climax.** Brilliant canary-yellow.

Climax Mixture. A blend of colors from deepest orange to lightest yellow.

Prices above 3, each: tr. pkt. (1/8 oz.), **85c**; 1/4 oz., **\$2.50**; 1/2 oz., **\$4.50**; 1/4 oz., **\$8.00**; 1 oz., **\$25.00**.

Five Point Program for Increased Profits.

Profits, like money, don't "grow on trees." You have to plan ahead to insure your share — especially so when you are dealing with a highly competitive, perishable like spring bedding plants. Here are a few suggestions.

1. **Plan your list of varieties carefully** — not forgetting the old standbys, but adding enough of the new ones to spice your list. Our Sweet Sixteen Selections have been made with this in mind.
2. **Make quality your first objective.** No matter what varieties you grow, if you don't do a good job of growing, you will have an inferior product and your sales will suffer accordingly. BALL RED BOOK (page 12) and GROWER TALKS (page 16) may give you some valuable ideas.
3. **Package them in convenient units** for attractive display and self-service sales. See our complete line of modern growing/selling containers.

4. **Advertise in your local newspaper** and by direct mail. The Ad Builder in our Sweet Sixteen Kit will help you prepare your ads, and the Bedding Plant Pamphlet was designed as a stuffer for your statements or as a handout to pre-sell your plants.

Take advantage of free publicity. Your local newspapers will use timely, newsworthy stories of your greenhouses or your community activities. Tie them in with your advertising program — to increase their effectiveness.

5. **Be sure your plants are displayed attractively.** Carefully selected varieties; well grown plants, properly packaged, attractively labeled and priced, in an area that is designed for convenient shopping — these are the ingredients for profitable bedding plants. Start now to make next bedding plant season your best yet.

LYCHNIS

PERENNIAL (L. species) 64,000 S. 3-4 weeks 65-75°

Chalcedonica (Maltese Cross). 3 ft. Scarlet flowers in heads. Tr. pkt. ($\frac{1}{16}$ oz.), **30c**; $\frac{1}{4}$ oz., **70c**; 1 oz., **\$2.00**.

Forrestii. 15 in. Pleasing shades of pink, carmine, and white. Excellent cut flower and bedding plant. Tr. pkt. ($\frac{1}{16}$ oz.), **35c**; $\frac{1}{4}$ oz., **\$1.10**; 1 oz., **\$3.30**.

MATRICARIA (Feverfew)

PERENNIAL (M. capensis) 145,000 S. 2-3 weeks 65-75°

SOW	SPACE	FLOWER
March	12-18 in.	July to Oct.

Feverfew, as this old-time favorite is popularly called, has been a valued crop for generations of growers. Sometimes offered as a bedding plant, it is more commonly grown as a greenhouse cut flower. For this purpose seed is sown early Nov. for May flowering, or it may be sown mid-Oct. and lighted 4 hours per night from Feb. 5 till buds show for a mid-April Easter. Grow at 50°.



- **Ball Double White Improved.** This strain has been carefully reselected for fully double flowers, and our own trials show it to be well over 90% true, double, imbricated blooms. Nearly all the single and Anemone types have been removed. Ball Orig. Seed.

Tr. pkt. ($\frac{1}{16}$ oz.), **75c**; $\frac{1}{8}$ oz., **\$2.00**; $\frac{1}{4}$ oz., **\$6.00**; 1 oz., **\$18.00**.

ALL-DOUBLE DWARF. 8 to 10 in. Uniformly dwarf and compact plants which are a solid mass of ball-shaped flowers slightly over $\frac{1}{2}$ inch across. Very attractive for border work and makes an excellent pot plant.

- **Golden Nuggets.** Rich butter-yellow.
- **Snow Puffs.** Pure white; very effective.

Prices above 2, each: tr. pkt. ($\frac{1}{32}$ oz.), **45c**; $\frac{1}{16}$ oz., **75c**; $\frac{1}{4}$ oz., **\$2.00**; 1 oz., **\$6.00**.

MESEMBRYANTHEMUM

ANNUAL (M. criniflorum) 100,000 S. 2-3 weeks 65-75°

Criniflorum (Livingstone Daisy). 6 in. Spreading plants literally covered with 1 in. flowers in many attractive colors. Needs full sun and a dry location.

Tr. pkt. ($\frac{1}{32}$ oz.), **35c**; $\frac{1}{4}$ oz., **\$1.20**; 1 oz., **\$3.60**.

MIGNONETTE

ANNUAL (Reseda odorata) 27,000 S. 2-3 weeks 65-75°

Ball Forcing Strain. 16 in. Earliest and whitest forcing variety. Sow in January for spring cutting; very fragrant.

Tr. pkt. ($\frac{1}{16}$ oz.), **25c**; $\frac{1}{4}$ oz., **60c**; 1 oz., **\$1.75**; 4 ozs., **\$5.00**.

MIMOSA

ANNUAL (M. pudica) 4500 S. 3-4 weeks 65-75°

Pudica (Sensitive Plant). Leaves collapse when touched. Interesting novelty. Tr. pkt. ($\frac{1}{8}$ oz.), **40c**; $\frac{1}{4}$ oz., **65c**; 1 oz., **\$2.00**.

MYOSOTIS (Forget-Me-Not)

ANNUAL (M. oblongata) 44,000 S. 2-3 weeks 65-75°

SOW	SPACE	FLOWER
June-Aug.	10 x 10 in.	Winter

This old-timer from Europe has been called Forget-Me-Not for so many years that few growers ever refer to it as Myosotis. It's used as a bench-grown short-stemmed cut flower crop and as a flowering pot plant. For winter use, seed may be sown from June to Aug., while nice spring pot plants can be had from a Dec.-Jan. sowing. Does best in a 50° house.



MYOSOTIS (Cont'd)

- **Ball Early.** Free flowering, spring blooming plants of this always popular bright blue flower can be had from a sowing made in December or January. Sow in Aug. for Nov.-Dec. blooms. This should not be confused with the other types listed with the perennials.

Tr. pkt. ($\frac{1}{16}$ oz.), **70c**; $\frac{1}{4}$ oz., **\$2.00**; 1 oz., **\$6.00**.

PERENNIAL (M. species) 42,000 S. 2-3 weeks 65-75°

- **Blue Bird** (Oblongata). 31,500 S. 12 in. Standard blue for spring greenhouse flowering.

Tr. pkt. ($\frac{1}{16}$ oz.), **45c**; $\frac{1}{4}$ oz., **\$1.15**; 1 oz., **\$3.25**.

Palustris Semperflorens. 12 in. Dwarf blue. Flowers from early spring until autumn.

Tr. pkt. ($\frac{1}{16}$ oz.), **35c**; $\frac{1}{4}$ oz., **90c**; 1 oz., **\$2.65**.

VICTORIA. A dwarf, compact strain. 6 to 8 in.

Dark Blue	Rose	White	Dwarf Mixture
------------------	-------------	--------------	----------------------

Prices above 4, each: tr. pkt. ($\frac{1}{32}$ oz.), **40c**; $\frac{1}{8}$ oz., **\$1.00**; $\frac{1}{4}$ oz., **\$1.85**; 1 oz., **\$5.50**.

ALPESTRIS. Biennial.

- **Royal Blue** (Indigo Blue). 12 in. deep rich blue.

Tr. pkt. ($\frac{1}{16}$ oz.), **40c**; $\frac{1}{4}$ oz., **\$1.00**; 1 oz., **\$3.00**.

MORNING GLORY (Ipomoea)

ANNUAL (Convolvulus species) 650 S. 3-4 weeks 65-75°

These vines are easily grown and most varieties are profuse bloomers, if grown in soil of low fertility and not over-watered. For bedding plant sales sow directly in Jiffy-Pots or bands 4 or 5 weeks before selling season.

Flying Saucers. Large flowers in varying striped combinations of bright blue and powdery white create an illusion of whirling motion. An interesting novelty.

Tr. pkt. ($\frac{1}{4}$ oz.), **90c**; 1 oz., **\$2.70**; 4 ozs., **\$8.00**.

- **Pearly Gates.** Clear white with slight cream shading in throat. Tr. pkt. ($\frac{1}{4}$ oz.), **45c**; 1 oz., **\$1.25**; 4 ozs., **\$3.50**.

- **Heavenly Blue.** Clark's Mammoth Early Free Flowering Strain. The popular bright blue shade that is a solid sheet of vivid color all summer. Tr. pkt. ($\frac{1}{2}$ oz.), **40c**; 1 oz., **75c**; 4 ozs., **\$2.25**.

Scarlett O'Hara. Vivid crimson-scarlet. Improved climbing strain. Tr. pkt. ($\frac{1}{4}$ oz.), **45c**; 1 oz., **\$1.25**; 4 ozs., **\$3.50**.

MOONFLOWER

ANNUAL (Ipomoea noctiflora) 110 S. 3-4 weeks 65-75°

Black-Seeded. Large-flowered, white, evening blooming climber. Tr. pkt. ($\frac{1}{2}$ oz.), **60c**; 1 oz., **\$1.00**; 4 ozs., **\$2.85**.

NAEGELIA (Temple Bells)

ANNUAL (Smithiantha hybrida) 1,500,000 S. 2-3 weeks 65-75°

Art Shades. Dwarf pot plants with Gloxinia-like leaves and clusters of slender, tubular flowers in shades of pink, red, yellow and orange; all with spotted throats. This showy plant requires the same culture as Gloxinias.

Tr. pkt. (about 1000 seeds), **\$1.50**.

NASTURTIIUM

ANNUAL (Tropaeolum majus) 175 S. 2-3 weeks 65-75°

Richly colored, long-stemmed, fragrant flowers are excellent for cutting or bedding; does best in cool climate.

DOUBLE GLEAM TYPE. Of trailing or climbing habit. Vigorous growers; fine for greenhouse cutting or window boxes.

- **Golden Gleam.** Golden yellow.
- **Scarlet Gleam.** A brilliant scarlet.
- **Gleam Mixture.** A complete mixture of all double varieties.

Prices above 3, each: 1 oz., **45c**; 4 ozs., **\$1.35**; 1 lb., **\$4.00**.

DWARF DOUBLE TYPE. Fully as double and large as the Gleam type, but of dwarf, compact, rounded growth. 12 to 15 in. high.

- **Cherry Rose.** Bright color. Very compact and exceptionally free flowering. 1 oz., **45c**; 4 ozs., **\$1.50**; 1 lb., **\$4.50**.

NASTURTIUMS continued on page 38

NASTURTIUMS (Cont'd)

Golden Globe. Golden yellow. **Scarlet Gem.** Brilliant Scarlet.

Mixture of all colors in this dwarf class.

Prices of above 3, each: 1 oz., **45c**; 4 ozs., **\$1.50**; 1 lb., **\$4.50**.

SINGLE VARIETIES

Dwarf Mixture of all colors in this class. 225 S.

1 oz., **35c**; 4 ozs., **\$1.00**; 1 lb., **\$3.00**.

NEMESIA

ANNUAL (*N. strumosa suttonii*) 90,000 S. 2-3 weeks 65-75°

NANA COMPACTA. 6 to 8 in. Brilliantly colored flowers on shapely, compact plants. This is an excellent item for spring combination use. Sow Jan.-Feb. for April-May blooming plants in 2¼ or 3-inch pots.



NEMESIA HI FI MIXTURE

Fire King. Cerise-scarlet.

Triumph Mixture. Very attractive with a wide range of colors.

Prices above 2, each: tr. pkt. (½ oz.), **35c**; ¼ oz., **85c**; ¼ oz., **\$1.50**; 1 oz., **\$4.50**.

- **Hi Fi Mixture.** 10 in. This strain surpasses any other in flower size and brilliant color range. More heat-resistant than other mixtures and remains in flower several weeks longer. Excellent for spring combination use. Illustrated above.

Tr. pkt. (½ oz.), **45c**; ¼ oz., **\$1.15**; ¼ oz., **\$2.00**; 1 oz., **\$6.00**.

NICOTIANA (Flowering Tobacco)

ANNUAL (*N. affinis*) 400,000 S. 1-2 weeks 65-75°

SOW	SPACE	FLOWER
March	12-18 in.	July-Aug.

Recent new strains have increased the popularity of this old-time favorite "Flowering Tobacco." It's one of the few plants in general cultivation which are native to North and South America. Nicotianas are easy to grow but prefer a rich soil and sunny location with plenty of water. Older forms bloomed only in the evening but the new Daylight Strain blooms in full sunlight.



NICOTIANA Cont'd next column

NICOTIANA (Cont'd)

Crimson Bedder. 15 in. Compact, very free flowering. Deep crimson-red. Tr. pkt. (½ oz.), **25c**; ¼ oz., **70c**; 1 oz., **\$2.10**.

- **White Bedder.** 15 in. Similar in habit and freedom of bloom to Crimson Bedder, but the glistening white flowers are much more showy. Try this as a background for colored dwarf Petunias. Tr. pkt. (½ oz.), **45c**; ¼ oz., **\$1.25**; 1 oz., **\$3.50**.

White (Daylight Strain). 2 ft. tall. Pure white. Tr. pkt. (½ oz.), **35c**; ¼ oz., **\$1.00**; 1 oz., **\$3.00**.

- **Sensation Mixture** (Daylight Strain). 2 ft. Flowers remain open all day. A bright blend of scented flowers with many new colors. Plants are bushy in habit, ideal for bedding. Tr. pkt. (½ oz.), **35c**; ¼ oz., **\$1.00**; 1 oz., **\$3.00**.



NIEREMBERGIA PURPLE ROBE

NIEREMBERGIA (Cup-Flower)

ANNUAL 175,000 S. 2-3 weeks 65-75°

- **Purple Robe.** 6 in. This is a wonderful bedding or edging plant. The 1-inch, deep violet-blue flowers are lavishly produced on dwarf plants throughout the summer. Retains its brilliance even under strong sunlight. Sow several weeks before most bedding plants to get early start. Pictured above. Tr. pkt. (1/128 oz.), **50c**; ½ oz., **\$1.75**; ¼ oz., **\$3.25**; ¼ oz., **\$9.75**.

Painted Daisy. See Pyrethrum, page 53.

PANSIES

See page 40.

PASSIFLORA (Passion Flower)

ANNUAL (*P. caerulea grandiflora*) 3600 S. 2-4 weeks 65°

Caerulea. Greenhouse climber with large pale pink flowers surmounted by a purple and white crown.

Tr. pkt. (½ oz.), **60c**; ¼ oz., **\$1.00**; ¼ oz., **\$1.75**; 1 oz., **\$5.00**.



"GROWER TALKS"

The only commercial monthly publication which is devoted **exclusively to flower growing**. Yours for 1 year for **\$1.25**; 3 years for **\$3.50**.

Binder for 24 issues of GROWER TALKS, **\$2.50**

PENTSTEMON (Pagoda Flower)

ANNUAL (*P. gloxinoides*) 55,000 S. 2-3 weeks 65-75°

Sensation Mixture. 2 ft. Attractive bell-shaped flowers produced on good spikes in an exceptional range of colors. Much used for bedding or in borders. Used as an annual or perennial. Tr. pkt. ($\frac{1}{32}$ oz.), **35c**; $\frac{1}{4}$ oz., **\$1.50**; 1 oz., **\$4.25**.

PERENNIAL (*P. Murrayanus grandiflorus*)

15,000 S. 3-5 weeks 65-75°

- **Avalon Mixture.** 3 ft. Spikes of fine, large flowers in an extremely wide and unusual range of colors. Tr. pkt. ($\frac{1}{16}$ oz.), **65c**; $\frac{1}{8}$ oz., **\$1.00**; $\frac{1}{4}$ oz., **\$1.85**; 1 oz., **\$5.50**.

PEPPER, CHRISTMAS

ANNUAL (*Capsicum species*)

9000 S. 3-4 weeks 65-75°



BALL CHRISTMAS PEPPER

Very showy pot plants for the December holiday season. Sow April to July, finishing one plant in a 3 or 4-inch pot or three in a 5. Does best grown under glass throughout summer.

- **Ball Christmas Pepper.** Compact plants with a profusion of cone-shaped fruit that is first green, later turning purple and then red. Ball Orig. Seed. Illustrated above. Tr. pkt., **\$1.00**; $\frac{1}{4}$ oz., **\$3.00**; 1 oz., **\$9.00**.

- **Candle Pepper** (Craigi Christmas Pepper). Similar to Ball Christmas Pepper, but the plants are smaller leaved. Small fruit, very freely produced well above the foliage, turns from white to brilliant red. Tr. pkt., **50c**; $\frac{1}{4}$ oz., **\$1.50**; 1 oz., **\$4.50**.

Hottentot. Very compact, dwarf habit, with 2 inch slender red fruits which cover the plant. Interesting novelty; fine keeping quality. Tr. pkt. ($\frac{1}{16}$ oz.), **50c**; $\frac{1}{4}$ oz., **\$1.50**; 1 oz., **\$4.50**.

Red Fangs. One-inch slender fruits, which turn directly from green to red, are borne in clusters. Well adapted for Christmas use. Ball Orig. Seed.

Tr. pkt., **50c**; $\frac{1}{4}$ oz., **\$1.50**; 1 oz., **\$4.50**.

See also Cherries, Christmas, page 18; Love Apple, page 33.

PERILLA

ANNUAL (*P. nankinensis laciniata*) 20,000 S. 1-2 weeks 65-75°

Burgundy. An attractive foliage plant with fringed, silvery violet leaves. Makes a first class filler plant, and is excellent as an outdoor background subject for brightly colored annuals. Tr. pkt. ($\frac{1}{16}$ oz.), **35c**; $\frac{1}{4}$ oz., **\$1.00**; 1 oz., **\$3.00**.

PETUNIAS.

See pages 42 through 53.

PHLOX

See page 54.

PHYSALIS

PERENNIAL (*P. Alkekengi*) 18,000 S. 3-4 weeks 65-75°

Francheti (Chinese Lantern Plant). 2 ft. Giant orange-scarlet pods. A perennial, but if sown early may be grown as an annual. Tr. pkt. ($\frac{1}{16}$ oz.), **40c**; $\frac{1}{4}$ oz., **\$1.10**; 1 oz., **\$3.00**.

Pinks. See Dianthus, page 25.

PLATYCODON (Balloon Flower)

PERENNIAL (*P. grandiflorum*) 28,000 S. 2-3 weeks 65-75°

Blue. 2 ft. A clear deep violet-blue; very attractive.

Tr. pkt. ($\frac{1}{32}$ oz.), **40c**; $\frac{1}{8}$ oz., **90c**; $\frac{1}{4}$ oz., **\$1.60**; 1 oz., **\$4.65**.

PLUMBAGO

ANNUAL (*P. capensis*)

2000 S. 3-4 weeks 65-75°

1½-inch flowers are borne on terminal spikes.

Blue. Clear azure-blue. 100 seeds, **90c**; 1000 seeds, **\$8.00**.

POPPY (Papaver)

ANNUAL	SOW	SPACE	FLOWER
PERENNIAL	Mar. Summer	18 x 18 in. 18 x 18 in.	July to Sept. June

Poppies are native of the Arctic regions southward through Europe to the Mediterranean. In sowing, do not cover Poppy seed, and since they are difficult transplanters, prick seedlings off into Jiffy-Pots to avoid transplanting shock. All Poppies can be cut if done while in bud and the stem tips dipped in boiling water for a few seconds. Poppies make extremely colorful beds and borders.

ICELAND. 275,000 S. 1 ft. The standard type for spring greenhouse forcing. Sow direct either in beds or pots. Quick growing for borders.

Sanford's Giants. A fine, brilliantly colored mixture.

Tr. pkt. ($\frac{1}{16}$ oz.), **45c**; $\frac{1}{4}$ oz., **\$1.25**; 1 oz., **\$3.75**.

PERENNIAL (*P. orientale*) 140,000 S. 1-2 weeks 65-75°

ORIENTAL POPPY. 3 ft. Large, cup-shaped flowers with crinkled petals.

Beauty of Livermere. Dark oxblood red.

Brilliant. Vivid fiery red.

Salmon Shades. Huge blossoms in unusual salmon shades.

Mixture of all colors.

Prices above 4, each: tr. pkt. ($\frac{1}{16}$ oz.), **45c**; $\frac{1}{4}$ oz., **\$1.20**; 1 oz., **\$3.60**; 4 ozs., **\$10.50**.

PORTULACA.

See page 53.



SEE PAGE 6 FOR
SWEET SIXTEEN PETUNIA AND ANNUAL
COLLECTIONS



Mr. Roggli, originator of the Roggli Giant Pansies.



Pansy seed field, Lake of Thun and the Swiss Alps in background.

Pansies (For Violas, see page 70)

ANNUAL (Viola tricolor) 20,000 S. 2-3 weeks 65-75°

It's not hard to understand why Pansies are second only to Petunias in popularity as seed grown bedding plants. Every home gardener likes them, and strains have been improved a lot in recent years. There are two basic schedules for growing Pansies for bedding plant sales:

Midwinter Sowing in December or January. After they have germinated, transplant them to Market-Paks or "Half Flats" and

grow them on in a cool house — not over 50°; 45° is better. They'll be in flower for April sales. This method costs less to grow and handle, and the plants are cleaner than the fall sown, over-wintered stock.

Summer Sowing (Early August). This is the accepted time for establishing plants which are spaced about 4 x 6 in. in frames, given some protection over winter—loose straw. Plants should be well established before winter sets in—even budded so that blooms will be available early in the spring to help sell the plants.

FOUR BEST

- **Ball Giant Mixture.** This is our most popular bedding Pansy mixture. We blend this ourselves, using the best available strains of Swiss Giants, adding separate varieties to insure a good balance of colors. Tr. pkt. ($\frac{1}{8}$ oz.), **\$1.15**; $\frac{1}{4}$ oz., **\$1.85**; $\frac{1}{2}$ oz., **\$3.25**; 1 oz., **\$9.75**; 4 ozs., **\$39.00**; 1 lb., **\$115.00**.
- **Roggli Giant Elite Mixture.** A choice Swiss bedding strain, predominating in rich red and bronze shades with the typical large, deep blotches. The finest large flowered Pansy. We supply originator's imported seed only. Tr. pkt. ($\frac{3}{8}$ oz.), **\$1.50**; $\frac{1}{4}$ oz., **\$4.50**; $\frac{1}{2}$ oz., **\$8.00**; 1 oz., **\$24.00**; 4 ozs., **\$80.00**.
- **Steele's Jumbo Mixture.** We handle the originator's seed of this popular American strain. Tr. pkt. ($\frac{3}{8}$ oz.), **\$1.15**; $\frac{1}{4}$ oz., **\$3.40**; $\frac{1}{2}$ oz., **\$6.10**; 1 oz., **\$10.35**; 1 lb., **\$16.55**.
- **Canadian Giants.** This selection from Maple Leaf Giants is extra large flowered. Tr. pkt. ($\frac{1}{8}$ oz.), **\$1.00**; $\frac{1}{4}$ oz., **\$1.65**; $\frac{1}{2}$ oz., **\$3.00**; 1 oz., **\$9.00**; 4 ozs., **\$36.00**.

America. An exceptionally free flowering mixture with medium sized blooms. Dwarf and extra early.

Tr. pkt. ($\frac{1}{8}$ oz.), **85c**; $\frac{1}{4}$ oz., **\$2.50**; 1 oz., **\$7.50**; 4 ozs., **\$22.50**.

Amsterdam Early Giants Mixture. A free flowering, large-flowered mixture of bright colors. Especially popular along the east coast. Tr. pkt. ($\frac{1}{8}$ oz.), **\$1.00**; $\frac{1}{4}$ oz., **\$2.75**; 1 oz., **\$8.00**; 4 ozs., **\$24.00**; 1 lb., **\$70.00**.

- **Ball Dwarf Giants Mixture.** A fine Swiss Giant strain selected for dwarf and compact habit.

Tr. pkt. ($\frac{1}{8}$ oz.), **85c**; $\frac{1}{4}$ oz., **\$2.50**; 1 oz., **\$7.50**; 4 ozs., **\$22.50**.

The dot (•) indicates varieties most dependably satisfactory in our experience and observation.

Ball Winter Flowering. Our greatly improved strain of this tall-growing, long stemmed, winter greenhouse cut-flower variety. At its best from a late summer sowing — not for bedding. Tr. pkt. ($\frac{1}{8}$ oz.), **\$1.00**; $\frac{1}{4}$ oz., **\$3.00**; $\frac{1}{2}$ oz., **\$5.40**; 1 oz., **\$16.00**.

Butterfly Mixture. Ruffled 2½ to 3-inch flowers, including unusual apricot, terra cotta and rosy orchid shades, are freely produced on vigorous plants. Originator's seed only.

Tr. pkt. ($\frac{3}{8}$ oz.), **\$1.00**; $\frac{1}{4}$ oz., **\$2.90**; $\frac{1}{2}$ oz., **\$5.20**; 1 oz., **\$9.40**.

- **Clear Crystals.** A sparkling mixture of red, purple, orange, lilac, yellow, blue and white colors — all without dark blotches. Flowers are slightly ruffled and nearly as large as the Swiss Giants. Excellent for buyers who dislike blotched Pansies.

Tr. pkt. ($\frac{1}{8}$ oz.), **85c**; $\frac{1}{4}$ oz., **\$2.50**; 1 oz., **\$7.50**; 4 ozs., **\$22.50**.

- **Color Carnival.** A remarkable American produced strain of Swiss Giants. Our trials indicate that it is quite similar to the best imported Roggli strain. Large flowers in a superb mixture of colors. Tr. pkt. ($\frac{3}{8}$ oz.), **\$1.50**; $\frac{1}{4}$ oz., **\$4.50**; $\frac{1}{2}$ oz., **\$8.00**; 1 oz., **\$24.00**; 4 ozs., **\$80.00**.

- **Englemann's Giant Mixture.** A large flowered and brightly colored strain, many being penciled or veined. Fairly compact growth. We offer originator's seed only.

Tr. pkt. ($\frac{3}{8}$ oz.), **\$1.00**; $\frac{1}{4}$ oz., **\$3.30**; $\frac{1}{2}$ oz., **\$6.00**; 1 oz., **\$18.00**.

Felix. Well ruffled flowers of good size carried on fairly dwarf plants. Colors are rich and unusual, each flower being marked with dark "whiskers" characteristic of this strain. Ball Orig. Seed. Tr. pkt. ($\frac{3}{8}$ oz.), **\$1.00**; $\frac{1}{4}$ oz., **\$3.00**; 1 oz., **\$9.00**.

Improved Swiss Giants. Predominates in rich bronze and red shades. Tr. pkt. ($\frac{1}{8}$ oz.), **\$1.00**; $\frac{1}{4}$ oz., **\$3.35**; 1 oz., **\$10.00**; 4 ozs., **\$36.00**; 1 lb., **\$108.00**.

Profitable Pansies . . .

Maple Leaf Giants. An excellent, extra large flowered strain. Heavy growth with good stems.

Tr. pkt. ($\frac{1}{8}$ oz.), \$1.00; $\frac{1}{4}$ oz., \$3.00; 1 oz., \$9.00; 4 ozs., \$26.00.

Masquerade. A California produced F_2 strain of the Steele's Jumbo type with typical Jumbo colors. Early flowering.

Tr. pkt. ($\frac{1}{32}$ oz.), \$1.50; $\frac{1}{8}$ oz., \$3.75; $\frac{1}{4}$ oz., \$7.00; 1 oz., \$22.00.

Oregon Giants. A complete mixture of long-stemmed, large flowered Giant Ruffled Pansies. Originator's seed.

Tr. pkt. ($\frac{1}{32}$ oz.), \$1.00; $\frac{1}{8}$ oz., \$3.00; $\frac{1}{4}$ oz., \$5.50; 1 oz., \$16.00.

- **Ruffled Rainbow.** An unusually uniform dwarf mixture characterized by medium large flowers with distinctly ruffled petals and a wide range of colors.

Tr. pkt. ($\frac{1}{32}$ oz.), \$1.00; $\frac{1}{8}$ oz., \$2.75; $\frac{1}{4}$ oz., \$5.00; 1 oz., \$15.00.

Tigress. "Miniature Pansies." Reds, yellows, orchids and purples in novel striped and blotched arrangements of at least 3 colors create a striking appearance.

Tr. pkt. ($\frac{1}{8}$ oz.), 60c; $\frac{1}{4}$ oz., \$1.75; 1 oz., \$5.00.

• FOUR ACES FORMULA MIXTURE

Our thorough knowledge of the advantages in each of the several Pansy specialist's strains has enabled us to formulate this special mixture which, properly handled, has proven to be an ideal Pansy strain. This mixture includes seed of the originator's **Roggli Giants** with their deep, bright shades and compact habit; **Steele's Jumbo** for early blooms; **Canadian Giants** with their exceptional flower size; and **Ball Giant Mixture** to complete a full, well rounded color range. Grown slowly and cool, the slight variations in habit of growth of these strains will not be found objectionable. Each of your Pansy customers will find his favorite strain in this mixture plus qualities imparted by the other top-notch Pansies. Special note: sow thinly and transplant all normal seedlings; otherwise, as in any other mixture, color balance is lost. A Ball Origination. Tr. pkt. ($\frac{1}{32}$ oz.), \$1.25; $\frac{1}{8}$ oz., \$3.25; $\frac{1}{4}$ oz., \$5.75; 1 oz., \$17.00; 4 ozs., \$50.00; 1 lb., \$190.00.

ROGGLI GIANT ELITE MIXTURE. The very finest large flowered Pansy.



WORLD-FAMED PANSIES

On a hillside just above the shore of lovely Lake of Thun in the shadow of the Swiss Alps lives a plantsman whose skill in growing Pansy seed has clearly surpassed all others. No one knows the secret of Mr. Roggli's methods of selection and crossing of strains which produce his incomparable Elite Mixture except the old gentleman himself and his son.

Abounding in deep rich intense shades of maroon-red, golden-yellow, blue, violet, and other Pansy shades, the Roggli Swiss strains offer depth and brilliance of color found in no other Pansies.

SEPARATE COLORS

F, Hybrid White. First F_1 Hybrid Pansy offered. Pure white; very small yellow eye. Uniformly dwarf and compact.

Tr. pkt. ($\frac{1}{32}$ oz.), \$2.20; $\frac{1}{8}$ oz., \$4.00; $\frac{1}{4}$ oz., \$12.00.

Alpenglow. Mahogany-red with dark center.

Berna. Dark velvety blue.

- **Coronation Gold.** The finest, clear golden yellow.

Delft Blue. Porcelain-blue.

Firebeacon. Bright, flaming orange with dark center.

Giant Orange. Solid light orange.

Jet Black. Midnight-purple — nearly true black.

- **Lake of Thun.** Large-flowered blue with darker center.

Mont Blanc. Ivory-white with small yellow eye.

- **Raspberry Rose.** Shades of pink with contrasting velvety blotch.

Rhinegold. Large-flowered yellow with dark center.

- **True Blue.** Solid mid-blue without blotch.

Prices above 12, each: tr. pkt. ($\frac{1}{32}$ oz.), 70c; $\frac{1}{8}$ oz., \$2.00; $\frac{1}{4}$ oz., \$3.50; 1 oz., \$11.00; 4 ozs., \$33.00.

Pay Dirt. Large yellow with black lines. Originator's seed. $\frac{1}{8}$ oz., \$2.85; $\frac{1}{8}$ oz., \$5.10; $\frac{1}{4}$ oz., \$9.20.

- **Paper White.** Pure white with small yellow eye.

- **Redskin.** Solid dark red.

Prices above 2, each: tr. pkt. ($\frac{1}{32}$ oz.), \$1.00; $\frac{1}{8}$ oz., \$2.75; $\frac{1}{4}$ oz., \$5.00; 1 oz., \$15.00.

ROGGLI'S SEPARATE COLORS

For flower size, uniformity of color and habit, these Originator-grown Swiss Giant Pansies are the finest separate color Pansies available. All have characteristic dark blotches. Originator's seed.

- **Eiger.** Yellow.

Alpengluhn. Mahogany-red.

Gemmi. Blackish purple with narrow ivory border.

Jungfrau. Ivory white, yellow eye.

- **Hohenfeuer.** Orange.

Monch. Golden yellow without blotch.

Blumlisalp. Raspberry-rose.

- **Thunersee.** Blue.

- **Roggli Giant Elite Mixture.** (See 4 Best, opposite page).

- **Roggli Straight Color Mixture.** Our own mixture of the above Roggli separate colors, blended by formula.

Prices above 10 varieties, each: tr. pkt. ($\frac{1}{32}$ oz.), \$1.50; $\frac{1}{8}$ oz., \$4.50; $\frac{1}{4}$ oz., \$8.00; 1 oz., \$24.00; 4 ozs., \$80.00.



Here are representative blooms of the fastest selling solid colors plus the popular variegated rose and white Gaiety. See diagram above for variety names.



**SWEET
SIXTEEN**
on these
two pages

**BALL ALL-
DOUBLE MIX
CHERRY TART**

• **Ball All-Double Mixture.** A Sweet Sixteen Selection for 1963. Our top quality, all purpose double mixture containing liberal portions of the most popular straight colors blended by formula. Varieties contained in this mixture are selected for uniformity of height and blooming date. All important double Petunia colors are represented in this strain. **Our finest double mixture.**

$\frac{1}{2}$ tr. pkt., **\$2.50**; tr. pkt., **\$4.00**;
 $\frac{1}{128}$ oz., **\$7.60**; $\frac{1}{64}$ oz., **\$14.45**;
 $\frac{1}{32}$ oz., **\$28.00**; $\frac{1}{16}$ oz., **\$55.00**;
 $\frac{1}{8}$ oz., **\$108.00**.

ANNUAL (P. hybrida) 285,000 S. 1-2 weeks 65-75°

Doubles must be sown earlier than ordinary Petunias to sell at the same time. For paks or flats, sow from 12 to 15 weeks before sale, depending on what your market demands. We recommend (Chicago, 50°) January 1 sowing for strong 3 inch the latter part of May. For May combinations, heavy 3 inch should be sown December 15 — no later. For 4 or 5 inch for April and May potted plant sales or 3 inch for March, a well-shaped plant with several blooms needs a November 15 sowing. Doubles, like other Petunias, need good drainage, and cool temperatures — they will lose their dwarf habit of growth if temperatures are run above 55° (unless there is an abundance of sunshine to offset this). Certain varieties need one pinch to retain suitable shape for finished plants. They all break very readily. Sonata, Snowball and Minuet are especially responsive to a pinch.

$\frac{1}{2}$ tr. pkt. contains 500 seeds; tr. pkt., 1000.

Double Petunias are among your most valuable spring plants.

- Hundreds of thousands are grown in paks and flats for bedding plant sales. Growers find that six plants in a Market-Pak No.



42 and twelve plants in a Market-Pak No. 60 both make quality units for ready sales.

- Doubles in 2¼ inch and 3 inch pots for bedding continue to be popular. Jiffy-Pots give superior quality plants and bring satisfied customers back for more. Having the first flower open also helps your sales.
- In 3 and 4 inch pots, double Petunias provide the backbone for May combinations.
- Heavy flowering doubles in 3, 4 and 5 inch pots are in good demand for Mother's Day.
- For budget sales in March and April, blooming plants in 3 inch pots have met excellent response.

We offer the finest strains of Double Petunias obtainable. Our recommendations are based on complete trials, both in 3 inch pots for spring blooming in our greenhouse and in our field trials for summer performance. We invite you to inspect these trials.

PETUNIAS

(All varieties on these two pages are **F₁ HYBRID** Petunias)

CANADIAN STRAINS — MIXTURES

- **Canadian Mixture, Improved.** This fine blend, composed of Canadian varieties only, now embraces a complete range of Petunia colors. $\frac{1}{2}$ tr. pkt., \$2.25; tr. pkt., \$4.00; $\frac{1}{128}$ oz., \$7.20; $\frac{1}{4}$ oz., \$13.00; $\frac{1}{32}$ oz., \$24.70; $\frac{1}{16}$ oz., \$48.00; $\frac{1}{8}$ oz., \$90.00.

SEPARATE COLORS

- **Alberta.** More dwarf in habit than Sonata with slightly smaller, loosely doubled pure white flowers.
- **Black Prince.** A bright burgundy-wine color. Flowers are only medium in size, but freely produced.
- **Blue Moon.** The most uniformly dwarf and free flowering dark blue double Petunia thus far. Medium sized, fully double blooms on uniform, well-shaped plants.
- **Canadian Queen Improved.** A very fine, true pink double. This variety is now the same as Rose of Canada. A first class double Petunia. Pictured on opposite page.
- **Cotton Candy.** An appealing soft creamy salmon suffused with pink. Extra large, fully double flowers borne in abundance on vigorous but dense plants. Fine for pots or bedding.

Colossal Shades of Rose Imp. The largest flowered All-Double Petunia. Shades of pink and salmon-rose. $\frac{1}{2}$ tr. pkt., \$2.00; tr. pkt., \$3.60; $\frac{1}{128}$ oz., \$6.50; $\frac{1}{4}$ oz., \$12.35; $\frac{1}{32}$ oz., \$23.50; $\frac{1}{8}$ oz., \$45.00; $\frac{1}{16}$ oz., \$85.00.

Northern Lights. Shades of medium deep rose with some bicolored types. Typical fine Canadian habit of growth.

- **Purple and White.** Large completely double flowers of richly variegated wine-purple and white. A striking combination.
- **Salmon Red.** The nearest approach to a true scarlet-red double; more nearly red than Allegro. Very showy.

Prices 8 separate colors, each: $\frac{1}{2}$ tr. pkt., \$2.25; tr. pkt., \$4.00; $\frac{1}{128}$ oz., \$7.20; $\frac{1}{4}$ oz., \$13.00; $\frac{1}{32}$ oz., \$24.70; $\frac{1}{16}$ oz., \$48.00; $\frac{1}{8}$ oz., \$90.00.

- **Burpee Orchid** (Not a Canadian variety). A warm, rosy lavender shade. Should be pinched. $\frac{1}{2}$ tr. pkt., \$2.20; tr. pkt., \$4.00; $\frac{1}{128}$ oz., \$7.50; $\frac{1}{4}$ oz., \$14.00; $\frac{1}{32}$ oz., \$27.00.

PAN-AMERICAN STRAINS

- **Allegro.** Medium to large, fully double flowers of clear, bright salmon are carried on fairly dwarf plants. The finest All-Double in its color class. Pictured on opposite page.
- **Caprice.** Medium sized rose-pink flowers are carried on fairly dwarf plants. One of the best rose doubles available.
- **Lyric.** A light salmon-pink about the color of the F₁ Hybrid Grandiflora, Maytime. Compact habit with larger than average, fully double flowers.
- **Minuet.** Medium sized lavender. Tall; should be pinched. Pictured on opposite page.
- **Nocturne.** Elk's Pride purple; medium large flowers are borne on vigorous, but compact plants.
- **Presto.** Large, fully double flowers of rich, bright rose and pure white. An unusually attractive variegated double Petunia.

Rhapsody. Large, fringed double flowers of rich burgundy. Uniformly dwarf, vigorous plants.

- **Sonata.** Extra large, fully double, pure white flowers. Should be pinched for best plant habit. Pictured on opposite page.

Prices these 8, each: $\frac{1}{2}$ tr. pkt., \$2.75; tr. pkt., \$4.75; $\frac{1}{128}$ oz., \$8.50; $\frac{1}{4}$ oz., \$16.25; $\frac{1}{32}$ oz., \$31.00; $\frac{1}{16}$ oz., \$59.00; $\frac{1}{8}$ oz., \$112.50.

Glorious Shades of Rose. Shades of pink and salmon-rose. $\frac{1}{2}$ tr. pkt., \$2.00; tr. pkt., \$3.50; $\frac{1}{128}$ oz., \$6.50; $\frac{1}{4}$ oz., \$12.50; $\frac{1}{32}$ oz., \$23.50; $\frac{1}{16}$ oz., \$44.75; $\frac{1}{8}$ oz., \$85.25.

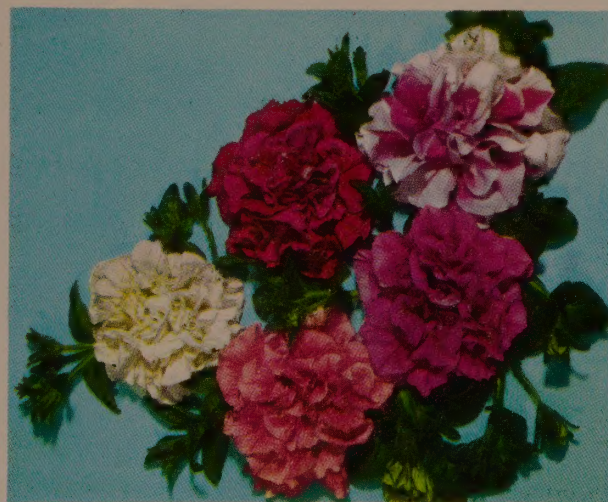
Glorious Mixture. Contains all Pan-American colors. In transplanting, be sure to use both large and small seedlings, thus insuring a complete range of colors.

$\frac{1}{2}$ tr. pkt., \$2.50; tr. pkt., \$4.50; $\frac{1}{128}$ oz., \$8.00; $\frac{1}{4}$ oz., \$15.50; $\frac{1}{32}$ oz., \$29.25; $\frac{1}{16}$ oz., \$55.75; $\frac{1}{8}$ oz., \$106.25.

ALL-DOUBLE MULTIFLORAS

- **America Improved.** Medium sized bright rose flowers. If pinched once will produce a very nice pot plant.
 - **Cherry Tart.** A Sweet Sixteen Selection for 1963. Medium sized, Carnation flowered blooms in a sparkling combination of brilliant rose-pink and white flowers. Pictured right.
 - **Cardinal (Cardinal Riches).** The first red multiflora All-Double Petunia. Pictured right.
 - **Honey Bunch (New).** A soft, clear salmon Multiflora double. This is a fine companion variety to Cherry Tart for habit and flower production. A most pleasing color. Pictured right.
 - **Pink Riches (New).** A medium pink Multiflora double. Pictured right.
 - **White Riches (New).** Pure white; free flowering. Pictured right.
- Prices** above 6, each: $\frac{1}{2}$ tr. pkt., \$1.50; tr. pkt., \$2.75; $\frac{1}{128}$ oz., \$4.75; $\frac{1}{4}$ oz., \$8.75; $\frac{1}{32}$ oz., \$16.75; $\frac{1}{16}$ oz., \$32.00; $\frac{1}{8}$ oz., \$60.75; $\frac{1}{4}$ oz., \$115.75; $\frac{1}{2}$ oz., \$220.50.

Clockwise, starting with the white: White Riches, Cardinal, Cherry Tart, Pink Riches, and Honey Bunch.



JAPANESE STRAINS

- **Attraction.** Striking, brightly colored rose and white mottled; deeper than Gaiety. Medium habit.
- **Blue Monarch** (An improved Blue Brocade). Purple. Prefer Nocturne.
- **Gaiety.** The blotched or variegated flowers combine bright rose-pink with contrasting pure white. Medium large blooms carried on dwarf, base-branching plants. Pictured on opposite page.

- **Pink Perfection** (World Beauty). Deep rose color and uniformly dwarf growth.

White Swan (Snowball Imp.). Large-flowered, pure white double.

Victorious Mixture. A formula mixture of all Japanese varieties.

Prices last 6, each: $\frac{1}{2}$ tr. pkt., \$2.25; tr. pkt., \$4.00; $\frac{1}{128}$ oz., \$6.50; $\frac{1}{4}$ oz., \$12.00; $\frac{1}{32}$ oz., \$22.00; $\frac{1}{16}$ oz., \$40.00; $\frac{1}{8}$ oz., \$75.00.

F₁ Hybrid



CALYPSO. Brilliant red and white variegated.



FANDANGO. Extra large ruffled Grandiflora.



CRUSADER. Gaily striped, extra free flowering.

Petunias, today, represent nearly one-half of the country's entire seed-grown bedding plant production. Together with Geraniums, they are, by far the most popular bedding plants in history. Why is this true? F₁ Hybrids are the answer. They provide home gardeners with nearly everything they want. Brilliant masses of summer-long color; ease of culture — no coddling needed; freedom from insects and diseases; and real value for their money. You can't "go wrong" with Petunias.

F₁ HYBRID GRANDIFLORAS

Of all Petunias, the F₁ Hybrid Grandifloras are the showiest and most versatile. They're unexcelled for pot or pak sales, combination boxes or for bedding display. Among the finest and most popular of these Petunias are those marked "Sweet Sixteen." Other Sweet Sixteen varieties will be found among the Multifloras and the All-Doubles.

WHEN TO SOW?

A mid-November sowing will produce good blooming plants of F₁ Hybrid Grandifloras in 4 inch pots for Easter and through April. Sow mid-December for 3 inch plants in flower by May 1; or January 1 to have 3's for Decoration Day. Pak or flat grown plants for May bedding plant sales can be had from an early March sowing if grown at 50°; cooler growing temperatures call for an earlier sowing. These dates are for the latitude of Chicago; about a week's difference should be allowed for each 200 miles north or south of this area.

BICOLORS

Cavalier. A Sweet Sixteen Selection for 1963. This variety is almost identical to the popular rose and white variegated Crusader, except for its color. Cavalier is a smooth, rich salmon and white; nicely fringed. This Petunia fills an important need in the list of F₁ Hybrid varieties. Ball Orig. Seed. Pictured opposite page. Price Code **B**.*

Calypso. A Sweet Sixteen Selection for 1963. Medium sized, well fringed flowers of brilliantly variegated scarlet and white are freely produced on dense growing, compact plants. Calypso attracted much attention in our trial grounds last summer. Pictured top left. Price code **B**.

Carioca. Large, beautifully fringed flowers, mottled and striped with rich wine-red and white, are prominently displayed on dense mounded plants. Ball Orig. Seed. Price code **B**.

Commando. Flashy scarlet and white variegated similar to Calypso in color and slightly taller. Ideal for pak or pot sales because of its early flowering habit. Ball Orig. Seed. Price code **B**.

- **Crusader.** A Sweet Sixteen Selection for 1963. Gaily striped, extra bright rose-pink on pure white with nicely fringed petals. Weather conditions and light intensity will sometimes affect the proportion of coloring in this or any other variegated Petunia. Pictured bottom left. Price code **B**.

Fandango (New). An extra large ruffled Grandiflora. Deep blue and white variegated. Good upright but compact habit. Could be classed with the Cascades because of the large flowers. Free flowering for this class. Pictured middle left. Price code **B**.

Sabre Dance Imp. Extra large, ruffled flowers variegated bright crimson and white. Most flowers exhibit a white star pattern. Habit is compact and vigorous. Price code **B**.

Exquisite Imp. Scarlet and white variegated. Price code **C**.

Minstrel. Large ruffled flowers in various combinations of white and rich violet-blue. Price code **C**.

Grandifloras King of Bedding Plants



Cavalier

Cavalier. A Sweet Sixteen Selection for 1963. This variety is almost identical to the popular rose and white variegated Crusader, except for its color. Cavalier is a smooth, rich salmon and white; nicely fringed. This Petunia fills an important need in the list of F₁ Hybrid varieties. **Ball Orig. Seed.** Pictured above. Price code **B***.



**SWEET
SIXTEEN**
on these
two pages

**CAVALIER
CALYPSO
CRUSADER**

*F₁ Hybrid Petunia prices are coded. Use letter following the description and find corresponding price in the price scale below.

PRICES

**F₁ Hybrid
Grandifloras**

Code	1/2 tr. pkt.	Tr. pkt.	1/128 oz.	1/64 oz.	1/32 oz.	1/16 oz.	1/8 oz.	1/4 oz.	1/2 oz.	1 oz.
A	\$1.65	\$3.00	\$5.30	\$9.75	\$18.00	\$34.25	\$65.00	\$124.00	\$236.00	\$450.00
B	1.50	2.75	4.75	8.75	16.75	32.00	60.75	115.75	220.50	420.00
C	1.00	1.75	3.50	6.50	12.00	20.00	36.00	65.00	127.00	250.00

F₁ Hybrid Grandifloras

WHITE

- **La Paloma.** Large, well fringed flowers of purest white with yellow throat and remarkable vigor are the outstanding points about this fine Hybrid Petunia. Price code **B***.

Snow Lady. A medium large, fringed and ruffled white somewhat similar to La Paloma. Price code **C**.

Snow Magic (New). An extra large flowered White Magic which is extremely free flowering. Price code **B**.

White Cascade. Sweet Sixteen Price code **B** See page 48.

White Magic. A Sweet Sixteen Selection for 1963. This Petunia, with its large ruffled pure white blooms, is outstanding for earliness, heavy flower production, and dwarf habit of growth. Ideal, in pots or for bedding. Pictured left. Price code **B**.

PINK and ROSE

- **Chiffon.** This Petunia is almost identical to Pink Magic and possesses all its good qualities but has flowers of a smooth, light pastel pink color that varies slightly in intensity. Ball Orig. Seed. Price code **B**.

Flirt. Medium sized, clear light pink. Price code **C**.

- **Holiday.** Medium large flowers of intense rose; several shades darker than Pink Magic. Ball Orig. Seed. Price code **B**.

Maestro. Extra large, ruffled flowers of bright cerise or cherry-rose with contrasting golden yellow throat. A warm and vibrant color. Price code **B**.

Pink Cascade. See page 48. Price code **B**

- **Pink Magic.** A Sweet Sixteen Selection for 1963. Early and free flowering, smooth bright pink. Unexcelled for pots, combinations or bedding. Pink Magic is unquestionably the most popular of all pink Grandiflora Petunias being grown today. Ball Orig. Seed. Pictured left. Price code **B**.

- **Prima Donna Improved.** Large, heavily ruffled, bright rose flowers with darker veins on vigorous, spreading base-branching plants. Price code **B**.

Rose Lustre. A bright rose-pink Grandiflora Petunia, similar in habit and flower size to the popular Blue Lustre and Scarlet Lustre. Price code **A**.

Rose Veil. Soft blush-pink with deeper rose veins. This new Petunia should help to further the increasing popularity of pastel colors. Price code **B**.



WHITE
MAGIC



PINK MAGIC

BLUE MAGIC



SALMON MAGIC — NEW MAGIC SERIES



(continued)

RED

Fire Dance Imp. Beautifully fringed, brilliant scarlet with bright golden throat. Ideal for combinations. Price code **B***.

- **Fire Gleam.** Medium sized, ruffled flowers of brilliant cherry-red — a color that almost seems to glow as if lighted. Price code **C**.

Red Cascade. See page 48. Price code **B**

Red Ensign. Large, plain-edged scarlet-red. Growth is dwarf, but erect. Price code **C**.

Scarlet Lustre. Large ruffled and fringed flowers of the same scarlet-red, gold throat color as Fire Dance, but a stronger grower and more disease resistant. Price code **A**.

- **Tango Imp.** A Sweet Sixteen Selection for 1963. A bushy plant with luxurious deep green foliage against which the large, bright red flowers stand out like flares. Flowers are moderately fringed and ruffled, and are freely produced. Makes a fine pot plant, is equally good for bedding. See below. Price code **B**.

CRIMSON

- **Matador.** Medium large, ruffled, Grandiflora blooms of the popular mahogany-red King Henry or Velvet Ball color. Makes a rich bedding show planted with white. Ball Orig. Seed. Price code **B**.

Toreador. Large, slightly ruffled flowers of solid, deep velvety crimson-red are carried on uniform, compact plants. Price code **B**.

SALMON

- **Ballerina.** Extra large, frilled flowers of clear, intense salmon that hold their color well under summer sun. Plants are vigorous and uniform. Price code **B**.

Fairyland. Medium large fringed and ruffled flowers of a soft shrimp-salmon shade; lighter than Ballerina. Vigorous and free blooming. Price code **C**.

- **Maytime.** A Sweet Sixteen Selection for 1963. This excellent F₁ Hybrid covers itself with large, ruffled Grandiflora type flowers of a soft-salmon-pink shade. Blooms are freely produced on dense, vigorous plants. Price code **B**.

Salmon Magic (New). A new addition to the popular "Magic" class of F₁ Grandifloras, producing a profusion of large, ruffled flowers of smooth, medium salmon. The dwarf, compact habit and early blooms make it ideal for pots, combinations and bedding. Pictured below left. Price code **B**.



**SWEET
SIXTEEN**
on these
two pages

**WHITE MAGIC
PINK MAGIC
BLUE MAGIC
MAYTIME • TANGO**

BLUE and PURPLE

Blue Lace. Medium sized, well fringed flowers of light orchid-blue with deeper veins. Good growth habit. Price code **B**.

- **Blue Lustre.** One of the finest clear violet-blue Petunias thus far. The medium large ruffled Grandiflora blooms are produced more freely than most blue Petunias, while the plant habit is uniform and bushy. Price code **A**.

- **Blue Magic.** A Sweet Sixteen Selection for 1963. May be described as an F₁ Hybrid Admiral with Admiral blue flowers up to 3 inches across. Growth habit is compact and vigorous. Pictured bottom, left page. Price code **B**.

Blue Mantle. Medium sized, ruffled flowers of rich violet-blue. Fairly dwarf, but erect plant with blooms well displayed. Price code **C**.

Lavender Lace. Heavily fringed Grandiflora type flowers of warm lavender-rose with deeper heliotrope veins. Price code **B**.

Modesty. Large, nicely fringed flowers of light lavender-blue. Price code **C**.

Sky Magic (New). Beautiful light heavenly blue. An excellent addition to the blues in the Grandiflora class. Price code **B**.

(F₁ HYBRID) GRAND BALL MIXTURE

This is a carefully blended formula mixture of F₁ Hybrid Grandiflora Petunias which we make up ourselves. Contains both fringed and ruffled types. Price code **B**.

(F₁ HYBRID) GRANDIFLORA COLLECTION

One tr. pkt. each of Pink Magic, White Magic, Blue Magic, Tango, Ballerina and Calypso (catalog value \$16.50) for **\$15.00**.



TANGO. Most popular large-flowered salmon-scarlet.

*F₁ Hybrid Petunia prices are coded. Use letter following the description and find corresponding price in the price scale below.

PRICES

**F₁ Hybrid
Grandifloras**

Code	1/2 tr. pkt.	Tr. pkt.	1/128 oz.	1/64 oz.	1/32 oz.	1/16 oz.	1/8 oz.	1/4 oz.	1/2 oz.	1 oz.
A	\$1.65	\$3.00	\$5.30	\$9.75	\$18.00	\$34.25	\$65.00	\$124.00	\$236.00	\$450.00
B	1.50	2.75	4.75	8.75	16.75	32.00	60.75	115.75	220.50	420.00
C	1.00	1.75	3.50	6.50	12.00	20.00	36.00	65.00	127.00	250.00



Cascade Petunias

Here is a new class of petunias which combine three important characteristics into one magnificent new strain.

1. **Flower Size.** Cascade blooms are among the largest diploid Petunias ever bred—5 inch blooms are commonplace. Their spectacular flower size makes them especially useful for combinations.
2. **Earliness.** One would think that such flower size would be gotten at cost of late blooming—for some strange reason, the reverse is true. Cascades are among the earliest Petunias blooming in our trials.
3. **Cascading effect.** There is an important trend back to tubs, hanging baskets, window and porch boxes, and other annual planters. Cascades keep their shape well in a bed, yet have long enough internodes to cascade beautifully out of such planters, making them ideal for this type of planting.

Plan to have lots of Cascade plants for your customers next spring. They will be back for more when they see the huge flowers.

Pink Cascade. Bright clear pink, slightly ruffled. Over twice as large as other grandiflora pinks and much earlier.

Red Cascade. Brilliant red—really red giant flowers. Not quite as early as the other Cascades but still way ahead of other popular grandiflora reds.

White Cascade. A Sweet Sixteen Selection for 1963. Pure, glistening white ruffled flowers are held up for all to see their huge size. A week earlier and larger than other grandiflora whites.

Prices above 3, each: $\frac{1}{2}$ tr. pkt., \$1.50; tr. pkt., \$2.75; $\frac{1}{128}$ oz., \$4.75; $\frac{1}{64}$ oz., \$8.75; $\frac{3}{32}$ oz., \$16.75; $\frac{1}{8}$ oz., \$32.00; $\frac{1}{4}$ oz., \$60.75; $\frac{1}{2}$ oz., \$115.75; 1 oz., \$220.50; 1 oz., \$420.00.

F₁ Hybrid Multifloras

BICOLORED

- **Comet.** Bright crimson-red with sharply defined white star. Habit dwarf and compact. Price code **F***.
- **Glitters.** This fiery combination of bright scarlet-crimson and white draws plenty of attention wherever grown. Price code **D**.
- **Polaris.** Violet-blue with sharply contrasting white star. Compact habit. Price code **F**.
- **Satellite.** A Sweet Sixteen Selection for 1963. Bright rose with a perfect white star. Very free flowering. Price code **F**.
- **Starflight.** The white-starred, deep crimson-purple of the popular Elk's Star in Hybrid form. Vigorous, free flowering and very showy. Price code **F**.

BLUE and PURPLE

- **Blue Ribbon.** A clear, violet-blue Multiflora Petunia identical in color to Blue Lustre. Very free flowering. Price code **E**.
- **Mercury.** The first F₁ Hybrid in the popular "Heavenly Blue" color class. The light yellowish throat enhances the soft blue coloring of this pleasing variety. Price code **F**.
- **Neptune.** A medium violet-blue, near indigo in color. Dwarf in habit, and free flowering. Price code **F**.

CRIMSON

- **Plum Dandy.** A new, distinct fuchsia color, sufficiently different to create interest. Price code **E**.
- **Mars.** Velvety blood-red. The popular Velvet Ball color in F₁ Hybrid Multiflora form. Price code **F**.
- **Sugar Plum.** A Sweet Sixteen Selection for 1963. Small flowers of bright orchid with deeper wine-red veins are freely produced on dwarf, compact plants. Sugar Plum possesses a wiry type of growth that remains firm throughout the growing season; the plants do not "break open" late in the summer as do most Petunias. Pictured above right. Price code **F**.

WHITE

- **Paleface.** A Sweet Sixteen Selection for 1963. Pure white flowers with small creamy eye. This vigorous and free-flowering variety is one of the best. Widely grown everywhere. Price code **F**.
- **White Satin.** A pure white addition to the Satin series. Price code **E**.
- **White Velvet.** A clear white Multiflora with a definite silvery sheen. Uniform habit of growth and very free flowering. Price code **F**.



SUGAR PLUM. Beautiful orchid Multiflora.



CORAL SATIN. Coral-rose Multiflora. See page 50

SWEET SIXTEEN
on these
two pages

WHITE CASCADE
SUGAR PLUM
PALEFACE
SATELLITE

*F₁ Hybrid Petunia prices are coded. Use letter following the description and find corresponding price in the price scale below.

PRICES

F₁ Hybrid Multifloras

Code	1/2 tr. pkt.	Tr. pkt.	1/128 oz.	1/64 oz.	1/32 oz.	1/16 oz.	1/8 oz.	1/4 oz.	1/2 oz.	1 oz.
D	\$1.35	\$2.50	\$4.50	\$8.00	\$15.50	\$30.00	\$57.00	\$108.00	\$214.00	\$390.00
E	1.15	2.10	3.35	6.15	11.25	20.50	39.00	74.35	141.50	270.00
F	1.00	1.75	3.00	5.50	10.00	19.25	36.50	69.50	132.00	252.00

F₁ Hybrid Multifloras (continued)



COMANCHE IMP. Popular scarlet-red Hybrid.



COMANCHE IMP.
PINK VELVET

RED

- **Aztec.** Bright scarlet-red with contrasting gold throat. A smaller version of Fire Dance, but more vigorous and free flowering. Price code **F**.
- **Comanche Improved.** A Sweet Sixteen Selection for 1963. This brilliant scarlet-red Hybrid Multiflora has become one of the most popular Petunias of all time. Ours is an improved strain from reselected parents and has performed outstandingly in our trials. Pictured at left. Price code **F**.
- **Red Satin.** Bright red, similar to Comanche except plants are slightly more dwarf and compact. Price code **E**.

Red Velvet. Our own F₁ Hybrid Multiflora scarlet-red. Similar to Comanche, but may show slight differences under some growing conditions. Price code **F**.

SALMON

- **Coral Satin** ALL-AMERICA SELECTION 1961. Masses of coral-rose blooms are produced on dwarf, compact, uniform plants. The color is deeper and more intense than Peach Satin. This is truly a beautiful Petunia which was widely admired in our trials last summer. Pictured on page 49. Price code **D**.
- **Linda.** Brilliant rosy salmon flowers, similar to Silver Medal, are carried on bushy, solid plants of great vigor. Will withstand heavy wind and rain without plants breaking down. Somewhat more dwarf than Silver Medal. Price code **F**.
- **Peach Satin.** Warm salmon-pink; somewhat taller than Red Satin. Price code **E**.
- **Salmon Velvet.** A medium deep salmon between Linda and Sioux in color. Flowers are lavishly produced on uniform, vigorous plants. Price code **F**.
- **Silver Medal.** Medium large flowers on soft salmon-pink are lavishly produced on free-branching plants. Price code **F**.
- **Sioux.** A deep, intense salmon shading toward red at throat. Midway between Linda and Comanche in color. Price code **F**.

HYBRID Wonderland (Multiflora) Mixture. Our own formula mixture of F₁ Hybrid Multifloras blended to provide a well balanced mixture of colors. Price code **F**.

HYBRID MULTIFLORA COLLECTION. One tr. pkt. each of Paleface, Blue Ribbon, Comanche Imp., Glitters, Cherokee, and Linda (catalog value, \$11.75) for **\$10.50**.

PINK and ROSE

Bonbon. A large flowered bright rose-pink with pleasing white throat. An improved "Rosy Morn" type with Hybrid vigor and flower size. Ball Orig. Seed. Price code **F***.

- **Cherokee.** A deeper rose-pink version of "Venus." Early and free flowering with excellent habit. Price code **F**.
- **Inca.** Bright deep cerise-rose with a golden throat. Price code **F**.

Pink Satin. Brilliant rose-pink. Globe-shaped plants are slightly taller than Red Satin. Price code **E**.

Pink Sensation. One of the most vigorous, free flowering, fastest growing Petunias we have ever seen. Light silvery pink. Price code **F**.

- **Pink Velvet.** A Sweet Sixteen Selection for 1963. This beautiful rose-pink might well be called an F₁ Hybrid Celestial Rose. It's identical in color and flower size to that old-time favorite, but more uniform in habit, color, and freedom of bloom. We think you'll agree that this is one of the best Hybrid Multifloras you've seen. Price code **F**.

Rose Charm. Rich brilliant Rose. Wonderfully vigorous, free branching and flowering. Price code **F**.

Venus. Bright rose-pink. Habit of growth is dwarf, compact, and spreading. Price code **F**.

*F₁ Hybrid Petunia prices are coded. Use letter following the description and find corresponding price in the price scale below.

PRICES

F₁ Hybrid Multifloras

Code	1/2 tr. pkt.	Tr. pkt.	1/128 oz.	1/64 oz.	1/32 oz.	1/16 oz.	1/8 oz.	1/4 oz.	1/2 oz.	1 oz.
D	\$1.35	\$2.50	\$4.50	\$8.00	\$15.50	\$30.00	\$57.00	\$108.00	\$214.00	\$390.00
E	1.15	2.10	3.35	6.15	11.25	20.50	39.00	74.35	141.50	270.00
F	1.00	1.75	3.00	5.50	10.00	19.25	36.50	69.50	132.00	252.00

GENERAL PETUNIA LIST (Other Grandifloras—Inbred Varieties)

- **Bingo.** Huge flowers, up to 5 inches across, richly variegated wine-red and white. About half are somewhat small flowered (3 inches), but are equally colorful. An excellent item for combination boxes or bedding. Pictured below.
Tr. pkt. (1000 seeds), **\$1.00**; 1/128 oz., **\$1.75**; 1/64 oz., **\$3.00**; 1/32 oz., **\$5.25**; 1/16 oz., **\$9.50**; 1/8 oz., **\$17.25**; 1/4 oz., **\$33.00**; 1/2 oz., **\$63.00**; 1 oz., **\$120.00**.

BINGO. Extra large flowered and very colorful.



- **Popcorn. A Super-Dwarf Grandiflora White.** Here is a really dwarf, large-flowered white. Good for pots or combinations, and for bedding.
Tr. pkt. (1/128 oz.), **\$1.50**; 1/64 oz., **\$2.75**; 1/32 oz., **\$5.00**; 1/16 oz., **\$9.50**; 1/8 oz., **\$18.00**; 1/4 oz., **\$33.00**.

Carnival F₂ Mixture. A colorful F₂ mixture containing all shades found in the Grandiflora type. F₂ Petunia seed is saved from specially bred and selected F₁ Hybrid varieties. Tr. pkt. (1/128 oz.), **\$1.50**; 1/32 oz., **\$3.85**; 1/16 oz., **\$7.00**; 1/8 oz., **\$11.00**; 1/4 oz., **\$21.00**; 1 oz., **\$63.00**.

CALIFORNIA GIANTS

California "Dwarf" Giants remain one of the top favorites of the home gardener and those desiring the unusual in pots or combinations. The dwarf compact plant with its huge ruffled blooms in a variety of exotic colors lends itself admirably to many uses.

For pot plants Ball Dwarf Giant No. 1 is the variety. It is the most dwarf and earliest California Giant. For a different color range or somewhat taller plants, use Ball Dwarf Giant No. 2. Sow December 15 for heavy 3 inch plants for Mothers Day, and January 10 to produce blooming 3 inch for late May bedding sales.



BALL DWARF GIANT No. 1 — Rose-Red and Rose and White

Dazzler. Free flowering, deep carmine-rose. Early and dwarf.

Dwarf Pink Glory. Glowing carmine-rose with white throat.

Elk's Pride Dwarf (Purple Prince). Rich velvety purple.

Fluffy Ruffles. An attractive fringed mixture for bedding work.

Royalty. Large, ruffled flowers in combinations of purple and white.

Snowstorm. Fine, large-flowered, ruffled white.

Theodosia Improved. Extra large, heavily fringed flowers of brilliant glowing rose with golden yellow throat.

White Cloud. Originator's Seed.

- **White Queen.** Extra large, wavy, pure white flowers and vigorous growth.

Ruffled Grandiflora Mixture. A well balanced formula mixture of varieties.

Fringed Grandiflora Mixture. A high class mixture made up of the best named varieties in the Fringed class.

Prices above 11, each: tr. pkt. (1/128 oz.), **\$1.00**; 1/64 oz., **\$1.80**; 1/32 oz., **\$3.25**; 1/16 oz., **\$6.00**; 1/8 oz., **\$11.00**; 1/4 oz., **\$20.00**.

- **Ball Dwarf Giant No. 1.** Flowers very early and lends itself well to growing in pots or paks for bedding. Has the most dwarf habit of all California Giants with about 75% of the flowers huge, highly ruffled in shades of orchid, pink, rose, red and bicolors. Illus. above.

Separate Colors of Ball Dwarf Giant No. 1. All possess the same desirable dwarf early flowering with 90% large flowers as the Mixture above.

Orchid

Rose-Red

Rose and White

Ball Dwarf Giant No. 2 — For Bedding: Some growers prefer this strain for bedding because it is somewhat more vigorous and includes some pink and copper shades not present in the extra dwarf Ball Dwarf Giant No. 1 strain.

Ramona. Large, open-throated flowers about half rose, balance pink and lavender. Bred especially for pots and combinations.

Prices above 6, each: 1/2 tr. pkt., **\$1.25**; tr. pkt. (1/128 oz.), **\$2.00**; 1/64 oz., **\$3.50**; 1/32 oz., **\$6.00**; 1/16 oz., **\$11.00**; 1/8 oz., **\$20.00**; 1/4 oz., **\$36.50**; 1/2 oz., **\$72.00**; 1 oz., **\$135.00**.



CAN-CAN. Extra dwarf mixture

- **Can-Can. (HYBRID)** Extra dwarf mixture of the popular California Giant Petunias. An F₁ Hybrid which gives assurance of more uniformly large flowered plants and additional hybrid vigor. Pictured at left.

½ tr. pkt., \$2.75; tr. pkt., \$4.50;
1/128 oz., \$8.50; ¼ oz., \$16.00;
½ oz., \$29.50; 1 oz., \$58.00.

California Giants Mixture No. 5. A very complete and attractive mixture of colors in the tall Giant class. Free flowering for bedding. Tr. pkt., \$1.25; ¼ oz., \$2.00; ½ oz., \$3.50; 1 oz., \$6.50.

California Giant — Supreme Florists' Strain. Fine bedding mixture in soft shades of pink, rose and salmon. Tr. pkt., \$1.25; ¼ oz., \$2.00; ½ oz., \$3.50; 1 oz., \$6.50.

DWARF VARIETIES

The following Petunia varieties seem admirably suited to pot plant growth, but are not so universally useful for outdoor planting. So we have taken the liberty of listing them separately to indicate a special adaptability to growth in pots in the greenhouse in spring. Many of the Petunias listed on other pages also make ideal pot plants. Check variety description for our recommendations.

- **Lace Veil.** Fringed, pure white flowers.

- **Little Giants Mixture.** Small, ruffled flowers freely produced on low growing plants. Colors range from crimson-red through rose and pink to white.
- **Robin.** Plants are dwarf and compact, with ruffled flowers of rich, bright rose.

Erfurt Mixture. A formula mixture of Dwarf Fringed Grandiflora varieties.

Prices last 4 Dwarf varieties, each: tr. pkt. (1/128 oz.), \$1.00; ¼ oz., \$1.80; ½ oz., \$3.25; 1 oz., \$6.00; 1 ½ oz., \$11.00; 2 oz., \$20.00.

BEDDING PETUNIAS — Inbred Varieties

Each year on the basis of reports from customers, as well as from our own flowering trials, we revise our list of varieties. It should be noted that this list does not include the F₁ Hybrid Multifloras, as we have placed these varieties in a "class by themselves."

- **Cheerful.** Medium large, star-shaped flowers of clear salmon on fairly dwarf plants.
- **Fire Chief.** Newly opened flowers are a true scarlet-red, turning to deep salmon-rose with age.
Glow. Bright rose-red flowers are produced on dense plants.
Lipstick. Bright cerise-rose flowers faintly shaded salmon, with white throat.
Prices above 4, each: tr. pkt. (¼ oz.), 65c; ½ oz., \$1.50; ¾ oz., \$2.50; 1 oz., \$4.50; 1 ½ oz., \$13.50.
- **Blue Bedder.** Vigorous growing, large flowered mid-blue.
- **Celestial Rose Improved.** Bright rose-pink; compact habit. Our strain has been unsurpassed in the florist trade for nearly 30 years.
- **Moonstone.** Light ivory-yellow.
- **Rosy Morn.** Popular rose-pink with large white throat.
- **Silver Blue Imp. (New).** A very attractive shade of light silver blue.
- **Snowball Imp.** Pure white. Compact and uniform, yet vigorous.

- **Topaz Queen.** Combination of glowing carmine-rose with distinct orange-scarlet overtones.

Twinkles. Very showy rose-pink with white star.

- **Velvet Ball.** Dark red; good compact habit.

Prices last 9, each: tr. pkt. (½ oz.), 65c; 1 oz., \$1.15; 1 ½ oz., \$1.65; 2 oz., \$3.00; 3 oz., \$9.00.

- **Admiral.** Large, attractively ruffled flowers; clear bright velvety blue.

- **Elk's Star.** Deep crimson-purple with white star.

Prices above 2, each: tr. pkt. (1/128 oz.), \$1.00; ¼ oz., \$1.75; ½ oz., \$3.25; ¾ oz., \$5.50; 1 oz., \$9.25; 1 ½ oz., \$16.50; 2 oz., \$48.00.

Best F₂ Mixture (New). Grown from selected F₁ Hybrids to give a balanced range of popular colors. Tr. pkt. (½ oz.), 65c; 1 oz., \$1.15; 1 ½ oz., \$1.65; 2 oz., \$3.00; 3 oz., \$9.00.

Dwarf Bedding Mixture. A blend of good bedding varieties. Tr. pkt. (½ oz.), 50c; ¼ oz., \$1.50; 1 oz., \$4.50; 4 ozs., \$13.50.

Dwarf Bedding Starred Mixture. Nice mixture of starred types. Tr. pkt. (½ oz.), 75c; ¼ oz., \$3.00; 1 oz., \$9.00; 4 ozs., \$27.00.

Balcony Mixture. Strong grower; spreading or semi-trailing habit. Tr. pkt. (¼ oz.), 40c; ½ oz., \$1.25; 1 oz., \$2.25; 1 ½ oz., \$6.75.

SWEET SIXTEEN COLLECTIONS FOR 1963

PETUNIAS

Collection A		
Ball All-Double Mix	½ Tr. Pkt.	\$ 2.50
Blue Magic	Tr. Pkt.	2.75
Calypso	Tr. Pkt.	2.75
Cavalier	Tr. Pkt.	2.75
Cherry Tart	½ Tr. Pkt.	1.50
Comanche Imp.	¼ oz.	5.50
Crusader	½ Tr. Pkt.	1.50
Maytime	½ Tr. Pkt.	1.50
Paleface	½ Tr. Pkt.	1.00
Pink Magic	1/128 oz.	4.75
Pink Velvet	½ Tr. Pkt.	1.00
Satellite	½ Tr. Pkt.	1.00
Sugar Plum	½ Tr. Pkt.	1.00
Tango Imp.	Tr. Pkt.	2.75
White Cascade	Tr. Pkt.	2.75
White Magic	1/128 oz.	4.75

CATALOG PRICE **\$39.75**
Less 8% Discount **3.18**

SWEET 16 COLLECTION A **\$36.57**

Collection B		
Ball All-Double Mix	Tr. Pkt.	\$ 4.00
Blue Magic	Tr. Pkt.	2.75
Calypso	Tr. Pkt.	2.75
Cavalier	Tr. Pkt.	2.75
Cherry Tart	Tr. Pkt.	2.75
Comanche Imp.	¼ oz.	10.00
Crusader	½ Tr. Pkt.	2.75
Maytime	Tr. Pkt.	2.75
Paleface	Tr. Pkt.	1.75
Pink Magic	¼ oz.	8.75
Pink Velvet	Tr. Pkt.	1.75
Satellite	Tr. Pkt.	1.75
Sugar Plum	Tr. Pkt.	1.75
Tango Imp.	Tr. Pkt.	2.75
White Cascade	1/128 oz.	4.75
White Magic	¼ oz.	8.75

CATALOG PRICE **\$62.50**
Less 8% Discount **5.00**

SWEET 16 COLLECTION B **\$57.50**

Collection C		
Ball All-Double Mix	1/128 oz.	\$ 7.60
Blue Magic	1/128 oz.	4.75
Calypso	1/128 oz.	4.75
Cavalier	1/128 oz.	4.75
Cherry Tart	1/128 oz.	4.75
Comanche Imp.	¼ oz.	19.25
Crusader	1/128 oz.	4.75
Maytime	1/128 oz.	4.75
Paleface	1/128 oz.	3.00
Pink Magic	¼ oz.	16.75
Pink Velvet	1/128 oz.	3.00
Satellite	1/128 oz.	3.00
Sugar Plum	1/128 oz.	3.00
Tango Imp.	¼ oz.	8.75
White Cascade	¼ oz.	8.75
White Magic	¼ oz.	16.75

CATALOG PRICE **\$118.35**
Less 8% Discount **9.47**

SWEET 16 COLLECTION C **\$108.88**

Our standard discounts under business terms apply to above prices. See page 6 for additional Sweet Sixteen Collections.

PHLOX. See page 54.

PORTULACA (Moss Rose)

ANNUAL (P. grandiflora) 280,000 S. 2-3 weeks 65-75°
6 in. very popular and showy bedding plant. While easily grown from seed direct sown in garden, your customers will eagerly buy young plants in bloom. The following varieties produce 85-90% true double flowers.

Pink	Red	Salmon	White	Yellow
Prices above 5, each: tr. pkt. (¼ oz.), 65c; ¼ oz., \$2.00; 1 oz., \$6.00.				

COLLECTION. 1 tr. pkt. each of above 5 colors, **\$2.85.**



PORTULACA DOUBLE MIXTURE

• DOUBLE MIXTURE

A Sweet Sixteen Selection for 1963. This is an unusually choice and wonderfully showy mixture of brilliant colors. Produces 85-90% true double flowers. A special imported strain. Pictured above.
Tr. pkt. (¼ oz.), 45c; ¼ oz., \$1.25; 1 oz., \$3.75; 4 ozs., \$11.00.

PRIMULA. See page 55.

PYRETHRUM (Painted Daisy)

PERENNIAL (P. roseum) 18,000 S. 1-2 weeks 65-75°

SOW	SPACE	FLOWER
March	12-15 in.	June

"Painted Daisies" are what most people call these colorful natives of Persia and the Caucasus. The 2 ft. stems are useful for cutting, and if flowers are kept cut they will bloom all summer. Plants will stand partial shade, but soil must be well drained. Double strains are never 100% double but the percentage is usually better the second season.



- **James Kelway.** Best deep crimson.
- **Robinson's Dark Crimson.** Giant flowered, dark red.
- **Rose.** Single pink flowers.
- **Robinson's Mixture.** Large single mixture.
Prices above 4, each: tr. pkt. (¼ oz.), 60c; ¼ oz., \$1.50; 1 oz., \$4.75.
- **Double Red Double White Double Yellow Double Pink**
Prices above 4, each: tr. pkt. (¼ oz.), 85c; ¼ oz., \$1.50; 1 oz., \$4.50.
- **Double Mixture.** The percentage of large flowers, with double row of petals, exceeds that of any other strain. Note, however, that 2 years' growth is required to produce the finest flowers in any double Pyrethrum.
Tr. pkt. (¼ oz.), \$1.00; ¼ oz., \$1.65; ¼ oz., \$3.00; 1 oz., \$9.00.

RICINUS (Castor Bean)

ANNUAL (R. communis) S. See below 2-3 weeks 65-75°

Very fast growing, tall, large-leaved plants. Good for tall hedges and windbreaks.

Crimson Spire. 75 S. 8 ft. Bronzy red foliage with crimson stems and red fruit.

Zanzibariensis Mixture. 25 S. 10 ft. Foliage bright green.

Prices above 2 varieties, each: 1 oz., 45c; 4 ozs., \$1.40; 1 lb., \$4.50.



PHLOX

ANNUAL (P. Drummondii)

14,000 S. 2-3 weeks 65-75°

SOW
Mar.-Apr.

SPACE
4-8 in.

FLOWER
July to Oct.

Annual Phlox is one of the few popular bedding plants that are native to the United States where wild forms grow profusely in Texas. Fall planting is done in the south for blooms in early spring. In other sections spring sowing is

recommended. They are useful for borders, bedding or for combination boxes. They should be handled the same as Petunias.

Tr. pkts. contain $\frac{1}{8}$ oz. unless stated otherwise.



PHLOX GLOBE MIXTURE



PHLOX TWINKLE

DWARF

Compact growth; fine for low bedding, border and combination work.



• GLOBE MIXTURE

A Sweet Sixteen Selection for 1963. 8 in. Pictured above. The best of the dwarf Phlox types. Many bedding plant growers are now using Globe exclusively for mixed dwarf Phlox. Reason: beautifully rounded, superior plant habit. Tr. pkt., **85c**; $\frac{1}{8}$ oz., **\$1.50**; $\frac{1}{4}$ oz., **\$2.65**; 1 oz., **\$8.00**; 4 ozs., **\$24.00**; 1 lb., **\$70.00**.

- **Twinkle**. 7 in. Dainty flowers of the Cuspidata or starred type, with pointed petals, are lavishly produced on dwarf, compact plants. An unusually wide assortment of colors, both solid and bicolor, are included in this blend. Blooms very early in Paks or flats and continues well into the summer. Tr. pkt., **80c**; $\frac{1}{8}$ oz., **\$1.25**; $\frac{1}{4}$ oz., **\$2.25**; 1 oz., **\$6.50**; 4 ozs., **\$19.00**.
- **Scarlet Ball** (Globe Type). 8 in. A pure scarlet-red selection out of the popular Globe Mixture. Tr. pkt., **\$1.25**; $\frac{1}{8}$ oz., **\$2.00**; $\frac{1}{4}$ oz., **\$3.50**; 1 oz., **\$10.00**.

NANA COMPACTA. A compact, free flowering strain with large blooms of predominantly solid colors. Excellent for pot plants, combinations or bedding.

- **Fireball** (Scarlet) **Violet** **Salmon-Rose**
Sky-Blue **Snowball** (White) **Isabellina** (Buff-yellow)
- **Beauty Mixture**

Prices above 7, each: tr. pkt., **50c**; $\frac{1}{4}$ oz., **\$1.50**; 1 oz., **\$4.50**; 4 ozs., **\$13.00**.

- **Ideal Bedding Mixture**. This florist strain is exceptionally uniform in its dwarf habit. An unusually bright mixture well adapted for pot and combination work or for borders. Tr. pkt., **75c**; $\frac{1}{4}$ oz., **\$2.00**; $\frac{1}{2}$ oz., **\$3.50**; 1 oz., **\$6.00**; 4 ozs., **\$18.00**.

TALL

GRANDIFLORA. 12 to 18 in. Fine, free flowering bedding and border material. Also nice for cutting.

- **Special Mixture** of all colors in this tall class. Tr. pkt., **40c**; $\frac{1}{4}$ oz., **\$1.10**; 1 oz., **\$3.25**.

TETRAPLOIDS. These are stronger growers and larger flowered than the regular Grandifloras.

- **Art Shades Mixture**. Mixture of pastel shades with white eyes. Tr. pkt., **40c**; $\frac{1}{4}$ oz., **\$1.10**; 1 oz., **\$3.25**.

Glamour. 12 to 15 in. A large and free flowering Phlox. Flowers are a rich salmon color with darker eye. Tr. pkt. ($\frac{1}{8}$ oz.), **85c**; $\frac{1}{8}$ oz., **\$2.50**; $\frac{1}{4}$ oz., **\$4.50**; $\frac{1}{2}$ oz., **\$8.00**.

PERENNIAL PHLOX

PERENNIAL (P. paniculata)

2500 S. 3-4 weeks 65-75°

Hardy Phlox should be sown outside in late fall to germinate in spring, or sown and refrigerated for about one month prior to germinating in a 65-75° temperature.

- **Beltville Beauty**. 3 ft. A greatly improved perennial Phlox. Large-flowered, and a wide assortment of colors. Tr. pkt., **85c**; $\frac{1}{4}$ oz., **\$2.50**; 1 oz., **\$7.50**.

Decussata Mixture. 3 ft. Our strain of this popular perennial Phlox contains many large-flowered, brilliantly colored types. Tr. pkt., **35c**; $\frac{1}{4}$ oz., **\$1.00**; 1 oz., **\$3.00**.

The dot (•) indicates varieties most dependably satisfactory in our experience and observation.

Primula



HARDY PRIMULA PACIFIC GIANTS

HARDY VARIETIES

PERENNIAL (P. species)

25,000 S. 3-6 weeks 65-75°

SOW

March

FLOWER

May

These beautiful 10-12 inch plants, sometimes called Cowslips, are natives of Europe and Asia, and have some of the most brilliant colors of all flowers. Germination is erratic — taking from a few weeks to several months. They require a moist, rich, well-drained soil in a shaded spot, and some light winter protection. Plants lifted in fall will make fine greenhouse pot plants from Feb. on.

- **Colossea** (P. Veris). 33,000 S. Extra large flowers (1½ to 2 in.) on long, stiff stems. Unusual colors. Tr. pkt. (½ oz.), **\$1.25**; ¼ oz., **\$3.00**; 1/8 oz., **\$5.25**; 1 oz., **\$17.00**.

Polyanthus Mixture. (P. Veris — Unwin's strain). Tr. pkt. (½ oz.), **\$1.00**; ¼ oz., **\$2.25**; 1/8 oz., **\$4.25**; 1 oz., **\$12.50**.

- **Pacific Giants** (P. Veris). Clearer colors, larger flowers, and longer stems of these fine varieties make them a distinct improvement. For pot plants and bedding. Illustrated above.

Red Shades

Yellow Shades

White Shades

Pink Shades

Blue Shades

Pacific Giants Mixture

Prices above 6, each: 1/128 oz., **\$2.25**; ¼ oz., **\$4.00**; 1/8 oz., **\$12.00**; 1/4 oz., **\$36.00**.

- **Denticulata.** 345,000 S. Large heads of ball-shaped flowers. Colors vary from white to deep rosy lilac. 1/128 oz., **\$1.80**; ¼ oz., **\$3.25**; 1/8 oz., **\$9.50**; 1/4 oz., **\$28.50**.

MALACOIDES

ANNUAL (P. malacoides)

385,000 S. 3-4 weeks 65-75°

SOW

June-Sept.

FLOWER

Jan.-Apr.

The original form of this Baby or Fairy Primrose came from China, but is not to be compared with today's large flowered Tetraploid forms. They are faster and easier to grow than Obconicas, and they are non-irritating to the skin. However, summer heat is hard on them and they must be grown cool — 45°. Sowings after Oct. 15 will result in blind growth.

- **Brightness.** This is an F₂ Primula. Flowers are a rich, luminous, scarlet-red.
- **Red Velvet.** Newly opened flowers are a bright coral-rose changing to deep, velvety crimson-red as they mature.

Prices above 2, each: tr. pkt. (1500 seeds), **\$1.50**.

- **Glory of Riverside Imp.** Beautiful salmon-rose flowers.
- **White Giant.** Fine pure white; large flowers and heavy stems.

Mrs. Eriksson of Riverside. Large flowers of glowing rose-red.

Ball Lavender. Bright orchid-lavender.

Mixture. Our own balanced formula mixture.

Prices above 5, each: tr. pkt. (1500 seeds), **\$1.25**; ¼ oz., **\$2.75**; 1/8 oz., **\$5.25**.

OBCONICA

ANNUAL (P. obconica)

130,000 S. 3-4 weeks 65-75°

SOW

Jan.-Oct.

FLOWER

Dec.-May.

This is the large flowered Primrose that has been widely grown as a pot plant for many years. Like most Primulas, it's a native of China. Choose the coolest spot you can find for summer seed sowing. Transplant to 2¼ in. Jiffy-Pots then directly to finishing pot. Use a light soil mix, avoiding acid peat or humus. Water carefully to avoid yellow leaves and shade during summer.

- **Fasbender's Red.** Extra large flowered deep crimson-red.
 - **Mueller's Berlin Rose** (Mueller's Rosea). Soft medium rose.
 - **Salmon-Rose** (Lachsrosa). Salmon-rose shades.
 - **Sky-Blue** (Coerulea). Clear mid-blue.
 - **White.** Large, clean flowers.
 - **Formula Mixture.** Carefully blended from above colors.
- Prices** above 6, each: tr. pkt. (1/128 oz.), **\$1.25**; ¼ oz., **\$2.75**; 1/8 oz., **\$5.00**.

CHINENSIS (Chinese Primula)

ANNUAL (P. chinensis)

18,000 S. 3-4 weeks 65-75°

Colorful and showy. Sow from March on for Christmas and later.

Special Mixture. A choice assortment of colors.

Tr. pkt. (1/128 oz.), **\$1.25**; ¼ oz., **\$2.00**; 1/8 oz., **\$3.75**.

ROSES FROM SEED

Polyantha. Single, semi-double and double blooms in shades of white, pink and rose. 100 seeds, **85c**; 500 seeds, **\$3.50**.

RUDBECKIA (Coneflower)

ANNUAL (R. hirta) S. See below 2-3 weeks 65-75°

SOW March	SPACE 18 x 18 in.	FLOWER Aug. to frost.
---------------------	-----------------------------	---------------------------------

These boldly colored flowers in shades of yellow, orange and reddish brown are natives of North America. They're often called Coneflowers and Black-Eyed Susans. Rudbeckias are easy to grow and do well in almost any soil. They are particularly long-lasting as cut flowers. The All-America winner, Gloriosa Daisy, belongs to this species.



DOUBLE GLORIOSA DAISY

All-America winner for 1961. Fine for bedding and cut flower use.

- **Double Gloriosa Daisies** ALL-AMERICA SELECTION 1961. 3 ft. Golden yellow blooms up to 4 inches across. Some flowers are fully double and ball shaped; others are a bit looser with dark centers, while a few are semi-double with brown eyes. Makes an excellent mass bedding display and is equally fine for cutting. Pictured above. Tr. pkt. ($\frac{1}{32}$ oz.), **\$1.00**; $\frac{1}{16}$ oz., **\$1.50**; $\frac{1}{8}$ oz., **\$2.50**; $\frac{1}{4}$ oz., **\$4.50**; 1 oz., **\$12.00**.

Goldflame. 18 in. Large, single orange flowers with brown centers are borne on stiff stems. Tr. pkt. ($\frac{1}{16}$ oz.), **85c**; $\frac{1}{4}$ oz., **\$2.50**; 1 oz., **\$7.50**.

Mahogany Flame. 16 in. Brownish red. Heat tolerant and free flowering. Tr. pkt. ($\frac{1}{16}$ oz.), **65c**; $\frac{1}{4}$ oz., **\$2.00**; 1 oz., **\$6.00**.

- **Single Gloriosa Daisy.** 50,000 S. 3 ft. Tetraploid, single flowers up to 6 inches across in shades of yellow and mahogany-red. Tr. pkt. ($\frac{1}{32}$ oz.), **45c**; $\frac{1}{16}$ oz., **85c**; $\frac{1}{4}$ oz., **\$2.50**; 1 oz., **\$7.50**.

PERENNIAL (Echinacea purpurea) 7000 S. 2-3 weeks 65-75°

Purpurea. 4 ft. Reddish purple flowers.
Tr. pkt. ($\frac{1}{16}$ oz.), **45c**; $\frac{1}{4}$ oz., **\$1.25**; 1 oz., **\$3.75**.

The dot (•) indicates varieties most dependably satisfactory in our experience and observation.

SAINTPAULIA (African Violet)

ANNUAL (S. ionantha) 750,000 S. 3-4 weeks 65-75°

SOW See below	FLOWER See below
-------------------------	----------------------------

We know of no plant that has attained such widespread popularity in such a short period of time as this, the African Violet. Seed is very small and must be carefully sown on a well prepared, screened medium with no soil covering. When potting, use a loose soil with plenty of sand, and peat or leafmold. Protect from sun, grow at 65° and avoid cold water. Plants flower in 8-12 months from sowing.



SAINTPAULIA, BLUE FAIRY TALE

- **Blue Fairy Tale.** Extra free blooming and fast growing. Bright blue flowers. Pictured above. 1000 seeds, **\$1.75**; 5000 seeds, **\$7.00**.
Single Mixture. A choice, large flowered mixture of colors in many attractive shades. 1000 seeds, **\$2.50**; 5000 seeds, **\$10.00**.

SALPIGLOSSIS

ANNUAL (S. sinuata superbissima) 125,000 S. 2 weeks 65-75°

SOW Feb.-Mar.	SPACE 12-15 in.	FLOWER July-Sept.
-------------------------	---------------------------	-----------------------------

This native of Chile is sometimes called "Painted Tongue," and it is a useful outdoor summer or spring greenhouse cut flower. For greenhouse forcing sow in January and space plants about 10 x 10 inches in beds, or finish in 5 inch pots for May flowering. Salpiglossis do not like cold, heavy soils or an exposed area. Outdoors they will benefit from some support.



Emperor Mixture. 2½ ft. Tall, for cutting. All colors.
Tr. pkt. ($\frac{1}{16}$ oz.), **30c**; $\frac{1}{4}$ oz., **75c**; 1 oz., **\$2.25**.

Bolero. 20 in. An F₂ mixture, outstanding for flower size, vigor, and full color range. Blooms profusely.
Tr. pkt. ($\frac{1}{16}$ oz.), **50c**; $\frac{1}{4}$ oz., **\$1.45**; 1 oz., **\$4.25**.

SALVIA. See pages 58-59.

SANVITALIA. See Creeping Zinnias, page 76.

SCABIOSA (Pincushion-Flower)

ANNUAL (*S. atropurea*) 4500 S. 2-3 weeks 65-75°

SOW Mar.-Apr. **SPACE** 8-12 in. **FLOWER** July to Frost

Europe was the original home of this annual which is sometimes called Pincushion Flower, but it apparently has become naturalized in California. It's easy to grow, and its 2 to 3 ft. stems are useful for cutting. Keeping the old flowers cut off will prolong flowering. Scabiosa is also useful as a late spring greenhouse crop from a Jan. sowing grown in a cool house.



- **Giant Mixture.** A special strain containing only the new large flowered varieties. Well balanced in good cut flower colors. Use this mixture if you want only a small planting of Scabiosa for cutting. Tr. pkt. (1/8 oz.), **50c**; 1/4 oz., **85c**; 1 oz., **\$2.25**.

PERENNIAL (*S. caucasica*) 2400 S. 2-3 weeks 65-75° 2 1/2 ft. Excellent large flowered perennial cut flower material. Seed germination sometimes slow. Flower heads up to 3 in. across.

- **House Mixture.** Large flowers ranging from white to deep blue. Tr. pkt. (1/8 oz.), **75c**; 1/4 oz., **\$1.35**; 1 oz., **\$4.00**.

Schefflera. See page 27.

SCHIZANTHUS (Butterfly Flower)

ANNUAL (*S. species*) 60,000 S. 1-2 weeks 65-75°

SOW Aug.-Jan. **FLOWER** Jan.-Apr.

Chile was the native home of the original species of this striking "Butterfly Flower," and nothing makes a showier pot plant or cut flower. They do best in a cool house, and must not be allowed to become pot-bound until their finishing pot size. Even for cut flower purposes they are best grown in pots, or in not more than 4 inches of soil to harden growth.



- **Ball Giant Flowered.** Extra large flowers (often 2 inches across) and unusually brilliant colors. Nice for cutting or makes a choice pot plant if pinched.
- **Ball Dwarf Mixture.** A dwarf-growing strain with large heads of medium sized flowers. Excellent 3 or 4-inch pot plant.

Prices above 2, each; tr. pkt. (1/32 oz.), **60c**; 1/8 oz., **\$1.80**; 1/4 oz., **\$3.25**.

SEDUM

PERENNIAL (*S. species*) 400,000 S. 3-4 weeks 65-75°

Golden Carpet (Acre). 3 in. A very nice extra dwarf evergreen. Small light yellow flowers produced in June. Very strong, hardy grower. Tr. pkt. (3000 seeds or more), **75c**.

Rock Garden Blend. Many species with various colors and forms make up this interesting mixture. Tr. pkt. (3000 seeds or more), **50c**.

SHAMROCK

ANNUAL (*Trifolium repens minus*) 28,000 S. 1-2 weeks 65-75°

True Irish Shamrock. For 2-inch St. Patrick's Day (March 17) plants sow in late December or early January using 3 or 4 seedlings per pot. Grow cool (50°) after germination. Our seed is the true *Trifolium* (Clover). The best results will be obtained in soil that is about 50% clay. Tr. pkt. (1/8 oz.), **20c**; 1/4 oz., **35c**; 1 oz., **\$1.20**.

SMILAX

ANNUAL (*Asparagus asparagoides*). 4000 S. 3-4 weeks 65-75° Popular climber for greens.

Tr. pkt. (1/8 oz.), **60c**; 1/4 oz., **\$1.10**; 1 oz., **\$3.00**.

SNAPDRAGONS. See pages 61-68.

SNOW-ON-THE-MOUNTAIN. See Euphorbia, p. 26.

SOLANUM. See Cherries, Christmas, page 18; Peppers, Christmas, page 39; and Love Apple, page 33.

STOCKS. See page 60.

STATICE

ANNUAL (*Limonium species*) 350 Seed-heads 2-3 weeks 65-75°

SINUATA. 2 1/2 ft. A greatly improved strain, in color and size.

SOW Feb.-Mar. **SPACE** 12-18 in. **FLOWER** Aug. to Oct.

All Statice have been reclassified into the genus *Limonium*, but the name "Statice" still persists in common use. They're natives of the Mediterranean region, and are sometimes called Sea Lavender. The sowing dates above apply to northern and central areas. In Florida, Statice is sown outdoors in late July or early Aug. for Jan.-Feb. cutting. As a cut flower it may be used fresh or dried for winter bouquets. Each seed head contains 1-7 seeds.



STATICE GRAND STAND MIXTURE. Greatly improved strain.

American Beauty.

Imp. Market Rose.

Twilight Lavender. Lavender-blue.

Apricot Pastel Tones. Pastels.

Iceberg. Non-fading white.

Roselight. Pure rose.

Gold Coast. Bright

yellow.

Midnight Blue.

Blue Bonnet. Sky-blue.

Grand Stand Mixture. A blend of all the above colors in this greatly improved Statice strain.

Prices above 9, each: 1/4 oz., **50c**; 1 oz., **\$1.50**; 4 ozs., **\$5.00**; 1 lb., **\$15.00**.

COLLECTION: 1/4 oz. each of the above 8 separate colors (catalog value \$4.00), for **\$3.60**.

Suworowi (Russian or Rat-Tail Statice). 12,000 S. Useful for greenhouse forcing. Long, bright rose spikes.

Tr. pkt. (1/8 oz.), **35c**; 1/4 oz., **\$1.00**; 1 oz., **\$3.00**.

PERENNIAL (*Limonium species*) S. See below 2-3 wks. 65-75°

Perennial Statice are very hardy, make good cut-flower material and can be dried and dyed.

- **Dumosa.** 19,000 S. 18 in. Dense clumps of silvery gray flowers. Tr. pkt. (1/8 oz.), **40c**; 1/4 oz., **\$1.00**; 1 oz., **\$3.00**.

- **Latifolia** (Sea Lavender). 40,000 S. 2 1/2 ft. Standard blue perennial Statice. Tr. pkt. (1/8 oz.), **35c**; 1/4 oz., **\$1.00**; 1 oz., **\$3.00**.

Perez. 14,000 S. Flowers in large rich blue heads first year from seed. Tr. pkt. (1/8 oz.), **50c**; 1/4 oz., **\$1.50**; 1 oz., **\$4.50**.



SALVIA ROYAL PURPLE. Introduced by us two years ago, this deep violet-blue Salvia has become increasingly popular. Not only is the deeper color superior to standard blue Salvias, but the plants flower early and more freely, producing good spikes on stems of sufficient length to be useful

in arrangements, especially at a time when spike flowers are scarce. The more compact habit permits wider use throughout the garden and eliminates the need of staking the plants. Old standby, St. John's Fire in foreground.

Salvia—for bright borders and dramatic contrast

SPLENDENS (Scarlet Sage)

SOW
Jan.-Mar.

SPACE
12-18 in.

FLOWER
June to frost.

It's hard to imagine anything more colorful than the brilliant scarlet of this popular "Scarlet Sage." From the original Splendens species which is a native of Brazil have come earlier and more dwarf forms, so that blooms may be had from June to frost on plants ranging from 10 to 30 inches in height. White, rose, salmon and purple varieties may also be had.

The wide range of sowing dates suggested above is because of the various sizes demanded. An early Feb. sowing will make 4 inch plants for May sales. March sowings will do for 2¼ inch Jiffy-Pot and Pak sales in May. Germinate, without covering, at 65-75°, then move to a 60° temperature. After transplanting, grow on at 55-60°. Salvia will not do well in a 50° temperature. Outdoors, they prefer full sun.

ANNUAL (S. species)

7500 S. 2-3 weeks 65-75°

NOTE: Salvia is especially sensitive to methyl bromide treated soil.

Salvia tr. pkts. contain 1/8 oz. unless otherwise stated.

EXTRA DWARF

- **Fireball.** As a border plant for taller growing annuals, or wherever **extra early blooming** and **more dwarf habit** is wanted. Fireball is your answer. It has a unique base-branching habit, and will bloom profusely and continually until frost. Blooms early (June 20) making flattened Salvia sell on sight! Also sells well in pots or paks — first flowers 10 weeks from sowing. 10 inches tall. Tr. pkt., **\$1.25**; 1/8 oz., **\$2.20**; 1/4 oz., **\$4.00**; 1 oz., **\$12.00**; 4 ozs., **\$36.00**.

The dot (•) indicates varieties most dependably satisfactory in our experience and observation.



SALVIA RED PILLAR. Unsurpassed for a brilliant show of deep fiery red spikes on dwarf, bushy plants of contrasting rich green foliage. Blooms about 10 days after the early varieties.

DWARF (Early)



• ST. JOHN'S FIRE

A Sweet Sixteen Selection for 1963. June 25. The most popular dwarf Salvia. About 12 inches high. Tr. pkt., **\$1.00**; 1/8 oz., **\$1.65**; 1/4 oz., **\$2.75**; 1/2 oz., **\$5.00**; 1 oz., **\$9.00**; 4 ozs., **\$27.00**; 1 lb., **\$90.00**.

- **Blaze of Fire.** June 30. The standard medium early strain. Closely follows St. John's Fire in flowering. 14 to 16 in. Tr. pkt., **85c**; 1/4 oz., **\$2.65**; 1/2 oz., **\$4.25**; 1 oz., **\$8.00**; 4 ozs., **\$24.00**; 1 lb., **\$80.00**.

MEDIUM (Midseason)

Firebrand (Early Harbinger). July 10. 18 in. Between Blaze of Fire and America in earliness of flowering. Remains in full flower throughout the summer. Extra long spikes. Tr. pkt., **85c**; 1/4 oz., **\$2.65**; 1/2 oz., **\$4.25**; 1 oz., **\$8.00**; 4 ozs., **\$24.00**; 1 lb., **\$95.00**.

Cardinal. July 20, 14-18 in. Intense red with attractive dark foliage. Tr. pkt., **85c**; 1/4 oz., **\$2.65**; 1/2 oz., **\$4.25**; 1 oz., **\$8.00**; 4 ozs., **\$24.00**; 1 lb., **\$80.00**.

Red Pillar (Hot Jazz — New). July 15. 18 in. Dense red spikes of deep fiery red. Attractive dark green foliage. Illus. above. Tr. pkt., **85c**; 1/4 oz., **\$2.25**; 1 oz., **\$7.25**; 4 ozs., **\$24.00**; 1 lb., **\$70.00**.

- **America** (Globe of Fire). July 20. 20 in. This is our uniformly true and even stock of this fine variety. Follows Firebrand in flowering date. Popular for background planting. Tr. pkt., **70c**; 1/4 oz., **\$2.00**; 1 oz., **\$6.00**; 4 ozs., **\$18.00**; 1 lb., **\$55.00**.

TALL (Late)

Bonfire (Clara Bedman). July 25. 26 in. Medium tall, very even. Popular for background planting. Tr. pkt., **70c**; 1/4 oz., **\$2.00**; 1 oz., **\$6.00**; 4 ozs., **\$18.00**; 1 lb., **\$55.00**.

Splendens Tall. August 10. 2 1/2 ft. The original late flowering species. Tr. pkt., **50c**; 1/4 oz., **\$1.50**; 1 oz., **\$4.25**; 4 ozs., **\$12.50**; 1 lb., **\$48.00**.

OTHER COLORS

White Fire. June 25. 12 in. A creamy white Salvia, similar in habit to St. John's Fire. Tr. pkt. (3/32 oz.), **\$1.00**; 1/8 oz., **\$3.00**; 1/4 oz., **\$5.00**; 1 oz., **\$15.00**.

Rose Flame. August 5. 20 in. Coral-pink calyx surrounding the deeper rose petal tube. Tr. pkt., **75c**; 1/4 oz., **\$2.00**; 1 oz., **\$6.00**.

- **Salmon Pygmy.** June 25. Pink with orange corolla. About 12 inches high. Tr. pkt. (3/32 oz.), **\$1.00**; 1/8 oz., **\$1.80**; 1/4 oz., **\$6.00**; 1 oz., **\$18.00**.

Violet Flame. June 30. Dark violet-purple flowers. Similar in habit and season to Blaze of Fire. Tr. pkt., **85c**; 1/4 oz., **\$2.25**; 1/2 oz., **\$3.85**; 1 oz., **\$7.25**.

Pink Rouge (New). July 1. 12-14 in. A salmon rose pink color. Quite comparable in habit to St. John's Fire. Tr. pkt. (3/32 oz.), **\$1.00**; 1/8 oz., **\$3.00**; 1/4 oz., **\$5.00**; 1 oz., **\$15.00**.

HORMINUM (Foliage Plant). 9500 S.

- **Pink Sundae.** July 15. 14 in. Bushy base-branching plants sending up many stems, each terminating in a cluster of bright pink leaves in the same manner as a Poinsettia. Very attractive, novel, and easy to grow. Tr. pkt., **40c**; 1/4 oz., **\$1.20**; 1 oz., **\$3.60**.

- **Blue Bird.** July 15. 18 in. A counterpart of Pink Sundae, but more useful because of its longer spikes of deep, true blue. Don't overlook the cut-flower value of this item; the 12 to 18-inch branches lend themselves beautifully to all kinds of floral arrangements. Tr. pkt., **40c**; 1/4 oz., **\$1.20**; 1 oz., **\$3.60**.

FARINACEA (Blue Salvia). 24,000 S.

Royal Blue. July 1. 3 ft. This is our own reselected strain, grown especially for us. Color is a true deep blue. Tr. pkt., **55c**; 1/4 oz., **\$1.65**; 1 oz., **\$5.00**; 4 ozs., **\$15.00**.

- **Royal Purple.** July 1. 2 ft. Dwarf deep violet-blue. A Ball introduction. See picture and description opposite page. Tr. pkt. (1/8 oz.), **\$1.00**; 1/4 oz., **\$3.00**; 1 oz., **\$9.00**.

Royal White. July 1. 3 ft. Dusty Miller white. Tr. pkt., **55c**; 1/4 oz., **\$1.65**; 1 oz., **\$5.00**.

PERENNIAL (S. patens) 3800 S. 2-3 weeks 65-75°

Patens (Gentian Sage). 2 1/2 ft. Deep, bright blue, hardy Salvia. Tr. pkt., **75c**; 1/4 oz., **\$2.00**; 1 oz., **\$6.00**.

BALL COLUMN STOCKS (Non-Branching)

ANNUAL (*Mathiola incana*) 16,000 S. 2 weeks 65-75°
The most important points in growing good greenhouse Stocks are: (1) plant only in sterilized, Terraclor-treated soil to avoid root rot; (2) grow them cool — not over 50° nights. A spacing of 3 x 6 inches is ample for good quality, and they may be safely sown in our latitude from July 15 to February 15 for blooms from January to early June. Later sowings may come blind. Constant breeding and selection maintain a uniformly high percentage of doubles in our strains, which may be further increased if the largest seedlings are selected in planting or thinning.

OUR "6 BEST" greenhouse varieties are dotted (•)

WHITE

No. 25 Minaret. This fine white combines the close-spaced spike of No. 16 with a longer stem.

White Goddess. Between Ball white No. 16 and Avalanche in season.

- **No. 16 Ball White — Medium tall.** This early pure white is the most popular variety on our entire list.

Avalanche. Finest white for outdoor growing; also excellent for greenhouse use although later than No. 16.

LAVENDER, BLUE and PURPLE

- **No. 1 Lilac-Lavender Improved.** Early blooming, silvery lilac.
- **No. 21 Purple Heart.** Bright violet-purple.

PINK, ROSE and RED

Pacific Pink. A bright, luminous salmon-rose-pink.

- **No. 22 Ball Supreme.** A long-stemmed, vigorous growing variety with fine, heavy spikes of rich silvery rose.
- No. 11 Ball Pink.** Somewhat lighter than No. 22.
- No. 14 Ball Rose.** Darker than Supreme No. 22.
- No. 7 Malmaison Pink, Improved.** Soft shell-pink.
- No. 6 American Beauty.** Rich deep carmine-rose.
- **No. 8 Ruby Improved.** Brilliant scarlet-crimson.

MISCELLANEOUS VARIETIES

- **No. 20 Ball Apricot.** Rich apricot tinged pink.
- No. 10 Mixture.** Our own formula mixture.
- Yellow Goddess.** A fine yellow, blooming about as early as Ruby No. 8.

COLLECTION: 1 tr. pkt. each of the 6 Best (dotted) varieties, for \$6.75.

Prices all above Non-Branching Stocks, each: ½ tr. pkt., 75c; tr. pkt. (⅓ oz.), \$1.25; ¼ oz., \$2.75; ½ oz., \$5.25; 1 oz., \$10.00; 4 ozs., \$30.00.

BRANCHING STOCKS

GIANTS OF CALIFORNIA (Improved Bismarcks)

Apple Blossom.
Pale pink.

Blood-Red. Ruby-red.

Chamois. Chamois
or buff.

Elk's Pride. Rich
purple.

Santa Maria.
Best white.

Prices above 9, each: tr. pkt. (⅓ oz.), 25c; ¼ oz., 65c; 1 oz., \$1.75; 4 ozs., \$5.00.

Golden Ball.
Ivory-yellow.

Lavender.
Lilac-Lavender.

Rose. Bright rose-pink.

Formula Mixture
of above colors.

ALL-DOUBLE SELECT

Light leaved doubles and dark leaved singles — apparent in the seedling stage at 50° — provide a positive means of separating singles from doubles in this strain.

Dwarf Park Mixture. A dwarf branching type. For outdoor bedding in cooler temperatures.

Tr. pkt. (⅓ oz.), 75c; ⅓ oz., \$1.20; ¼ oz., \$4.00; 1 oz., \$12.00.

TRYSOMIC HI-DOUBLE (Giant Imperial)

2½ ft. An unusual race of branching Stocks which makes use of scientific plant breeding principles to produce 80-85% double flowering plants.

Chamois. Buff pink. **Canary-Yellow**
Fiery Red **Bright Rose**
Lilac-Lavender **Navy-Blue**
White **Trysomic Hi Double Mix.**

Prices above 8, each: ½ tr. pkt., \$1.00; tr. pkt. (⅓ oz.), \$1.75; ⅓ oz., \$2.90; ¼ oz., \$5.00; 1 oz., \$15.00.

OUTDOOR BEDDING STOCKS

DWARF TEN WEEK

Makes very attractive pot plants.

Blood-Red **Lavender** **Canary-Yellow**
Deep Rose **Purple** **White**
Formula Mixture

Prices above 7, each: tr. pkt. (⅓ oz.), 30c; ¼ oz., \$1.00; 1 oz., \$3.00; 4 ozs., \$9.00.

The dot (•) indicates varieties most dependably satisfactory in our experience and observation.

7 WEEK TRYSOMIC DWARF DOUBLE

12 inches. The only bedding Stock which blooms outdoors during hottest weather as proven in our trials where they flowered freely when other varieties hardly made a showing.

Plants first throw a central spike and then produce side branches which flower later giving a colorful display over several weeks. In some areas this strain has been flowered in flats.

Brilliant Red **Deep Blue** **Light Yellow**
Lilac **Pure White** **Rose**

Trysomic 7-Week Mixture. Complete color range.

Prices above 7, each: ½ tr. pkt., \$1.00; tr. pkt. (⅓ oz.), \$1.75; ⅓ oz., \$2.90; ¼ oz., \$5.00; 1 oz., \$18.00.

Greenhouse Snapdragons

PROGRAM YOUR SNAPS

As all progressive growers realize, there is no substitute for advance planning. It is here that the classification of Forcing Snapdragons into four flowering period groups has found its greatest usefulness. It took many years of breeding, trialing, and observation to develop a means of classification, and each year's experience results in additional refinements and readjustments to fit varieties into the proper category. Programming Snapdragons for year round production, or in conjunction with other crops, is well established and the use of the flowering period groups has been a principal tool in its development. This classification is based on a variety's reaction to day length, light intensity, and temperature. At one extreme would be Class I which includes varieties that produce quality stems and spikes at 50° minimum temperature under the short days and low light conditions of midwinter. The other extreme would be Class IV varieties which require long days, high light intensity, prefer higher temperatures, tolerate extremely high temperatures, and still produce marketable flowers under these conditions. Classes II and III are tailored to meet the varying conditions of light, day length, and temperature existing between the two extremes mentioned.

GROUP I — Dec. 10 to Feb. 15 flowering

GROUP II — Feb. 15 to May 10 and Oct. 25 to Dec. 10

GROUP III — May 10 to June 30 and Sept. 10 to Oct. 25

GROUP IV — July 1 to Sept. 10.

IMPORTANT REASONS FOR RESPONSE GROUPS

By categorizing Snapdragons into these four flowering period or response groups, we are able to:

- (1) Select the right combination of varieties for flowering at a particular season. This insures "cut out" over the minimum period of time.
- (2) Insure uniform and unchecked growth. By being able to select varieties within the same group, we can maintain uniformity of our production.
- (3) We are able to govern the desired production of percentages of the various colors at any given season.

Certainly no grower should mistakenly feel that classification of Snap varieties is a substitute for good culture. **There can be no substitute** for using good germination practices, direct benching of seedlings into the proper type of soil which (preferably) has been steamed, and the maintenance of good watering, feeding, and pest control practices. These things are of course basic.

OUR SNAP PLANNING SERVICE

For the grower who is interested in year round production of Snaps, write us giving the size and number of beds you wish to schedule for year round production. Our Grower Service Department will do the rest — plan what we consider the best varieties for each season, sowing dates, spacing, amounts of seed required, include cultural information, and send you a complete schedule. Then upon receipt of your O.K., seed for your first rotation will be sent; and as each new sowing date comes up new seed will arrive fresh from our "controlled environment storage."

Our Grower Service Department is also well qualified to schedule Snapdragons in combination with other crops. Scheduling a Snap crop to clear in time for bedding plant production, to follow bedding plant production, or between crops of Chrysanthemums are common examples of scheduling of this type. Here, again, simply write us giving crops you wish to occupy given bench space and when the space must be available for any one specific crop. The trained personnel of our Grower Service Department are also always glad to offer any assistance with cultural problems.

SOWING DATES

The dates given here are intended as suggestions only — based on our experience here in the Midwest.

SINGLE STEM — RAISED BENCH — NORTH

SOW	FLOWER	SOW	FLOWER
Aug. 16	Dec. 16 — Jan. 1	Feb. 25	June 10 — June 15
Aug. 28	Jan. 20 — Feb. 10	Mar. 10	June 18 — June 23
Sep. 17	Feb. 23 — Mar. 15	Mar. 31	July 3 — July 8
Oct. 6	Mar. 16 — Mar. 31	Apr. 20	July 18 — July 23
Oct. 25	Apr. 5 — Apr. 20	May 5	July 31 — Aug. 5
Nov. 14	Apr. 25 — May 5	May 25	Aug. 20 — Aug. 25
Dec. 11	May 10 — May 15	June 10	Sept. 5 — Sept. 10
Jan. 2	May 19 — May 24	July 3	Sept. 24 — Sept. 29
Jan. 20	May 26 — May 31	July 17	Oct. 16 — Oct. 26
Feb. 9	June 3 — June 8	Aug. 1	Nov. 10 — Nov. 19

SINGLE STEM — RAISED BENCH — SOUTH

SOW	FLOWER	SOW	FLOWER
Aug. 25	Dec. 9 — Dec. 29	Feb. 22	May 28 — June 2
Sept. 8	Jan. 13 — Feb. 2	Mar. 26	June 21 — June 26
Sept. 29	Feb. 17 — Mar. 7	Apr. 21	July 16 — July 21
Oct. 28	Mar. 21 — Apr. 6	May 6	Aug. 1 — Aug. 6
Dec. 9	Apr. 16 — Apr. 26	May 27	Aug. 22 — Aug. 27
Jan. 17	May 6 — May 11	June 21	Sept. 16 — Sept. 21

PINCHED CROPS — RAISED BENCH — NORTH

Wait till breaks are at least an inch long in leaf axils — plant usually about 8 inches high — then pinch to leave 3 pairs of leaves.

SOW	FLOWER	SOW	FLOWER
July 20	Mid-December	Sept. 5	Early March
Aug. 1	Mid-January	Sept. 20	Mid-April
Aug. 20	Mid-February	Nov. 15	Mid-May



BEST OF FLOWERING GROUPS

One of the most important advantages of Snapdragon classification into Flowering Groups is increased accuracy of timing. The "right combination" of varieties within each group is of prime importance. This insures not only cut out of each unit in time for the next rotation but cut out of individual varieties within the unit at the same time. This is of particular advantage to the grower who must flower several colors on the same bench, or the grower who is growing a single crop to flower at one specific time.

Pictured are the varieties within each group which not only offer excellent quality but also flower closely together within their groups.

GROUP I

Sierra, paper white; Doubloon, deep yellow; Spanish Lady, light pink; Buccaneer, deep true red, and Senorita, medium light lavender. These varieties offer top quality during the flowering period of Dec. 10 to Feb. 15. They represent the most popular colors. Available for those who wish other colors are fine bronze and rose varieties.

GROUP II

Treasure Chest, rose (dark pink); Navajo, deep crimson red; Twenty Grand, ivory white; Hercules, light pink, and Swaps, medium dark yellow. The varieties listed offer the best over-all quality for flowering Feb. 15 to May 10 and Oct. 25 to Dec. 10. At this time of year many other fine varieties are available; however, in our experience these are most closely timed.

GROUP III

Panama, paper white; Pan-American Summer Pink, medium light pink; Tampico, medium yellow. This group flowers best May 10 to June 30 and Sept. 10 to Oct. 25. All offer exceptionally fine quality of the three important colors.

GROUP IV

Texas, white; Tampico, yellow; Florida, light pink. This group should be scheduled for flowering July 1 to Sept. 10. This is probably the most difficult time of year to produce good quality Snapdragons. Here also color range is limited. All three varieties shown offer tops in quality and production.



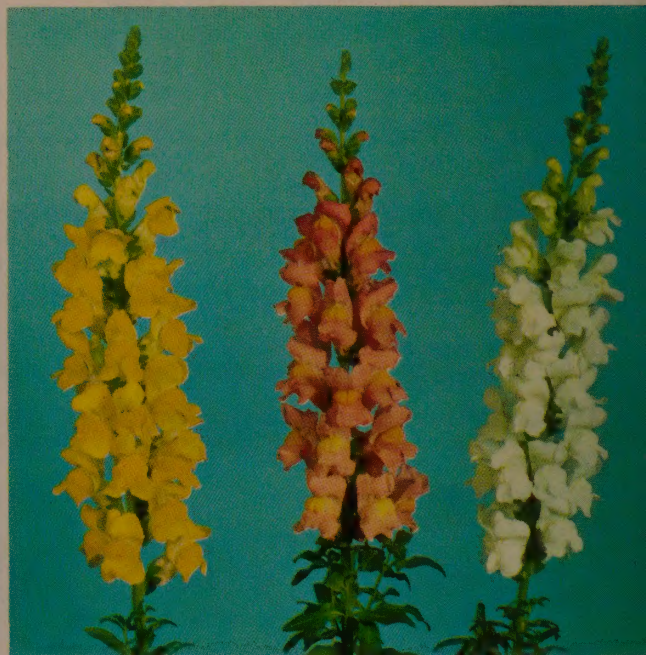
GROUP I. SIERRA, DOUBLOON, SPANISH LADY, BUCCANEER, SENORITA



GROUP II. TREASURE CHEST, NAVAJO, TWENTY GRAND, HERCULES, SWAPS



GROUP III. PANAMA, PAN-AMER. SUMMER PINK, TAMPICO



GROUP IV. TAMPICO, FLORIDA, TEXAS

Complete list of varieties by flowering groups

All Snapdragons listed on these pages are F₁ Hybrid varieties except those marked "inbred" which are self-pollinated kinds.

Trade packets contain about 2000 seeds.

GROUP I December 10 to February 15

WHITE

- **Sierra** (Ball). Fine pure white. Produces good spikes under midwinter conditions. Illus. page 62.
- **Albion** (Yoder Bros.). A pure white which in our trials produces a better spike than White Knight.
- **Citation** (Yoder Bros.). Ivory. Very fine long spikes and clean, hard stems.
- **Ohio** (Yoder Bros.). Pure paper white with compactly spaced long spikes.
- **Pan American White**. Pure white.
- **Spartan White** (M. S. U.). Clean growing, pure white.
- **White Knight** (Yoder Bros.). A pure white.

YELLOW

- **Doubloon** (Ball). Brightest color of all midwinter yellow Snaps. Long Spikes. Illus. page 62.
- **Vermont** (Yoder Bros.). Primrose or pastel yellow. Blends well with other colors for retail work.
- **War Admiral** (Yoder Bros.). Excellent medium yellow.

BRONZE

- **Coronado** (Ball). Vigorous and uniform, medium honey-bronze. A fine commercial Snap.
- **Cavalcade** (Yoder Bros.). A lively golden bronze.
- **El Dorado** (New — Pan-American). Light honey bronze. Hard, clear stem, good spikes.

RED

- **Apache** (New — Pan-American). Crimson-red. Excellent spike, clean hard stem.
- **Buccaneer** (New — Pan-American). Vigorous, uniform, true wine-red. Illus. page 62.
- **Cherokee** (Ball). A true "Christmas" scarlet-red — not the crimson or wine-red color commonly grown.

LAVENDER and MAGENTA

- **Esquire** (Ball). Bright fuchsia-purple.
- **Senorita** (New — Pan-American). Fine medium lavender. Hard stem, good spike. Illus. page 62.

LIGHT and MEDIUM PINK

- **Spanish Lady** (Ball). An excellent light pink with long, tapering spikes. Illus. page 62.
- **Nashua** (Yoder Bros.). Light pink.
- **Rebecca** (J. S. Yoder). A slightly lighter pink than Christina.
- **Whirlaway** (Yoder Bros.). Pink with large yellow lip.
- **Wintergreen** (Yoder Bros.). Medium pink. One of the best commercial Snaps.

ROSE

- **Rosita** (Ball). Smooth, deep rose. Excellent, long spikes and hard wiry stems.
- **Better Times**. Bright cerise-rose. ½ tr. pkt. of this inbred variety contains 2000 seeds; tr. pkt. 4000 seeds.
- **Christmas Cheer** (Windmiller). Bright rose.
- **New Times** (Pan-American). Bright cerise-rose. An improved Better Times.
- **Wisconsin** (Yoder Bros.). A fine deep rose, near Better Times in color. Good stems and spikes.

TABLE I — NORTHERN VARIETIES

Montana, Nebraska, Iowa, Central Illinois, Central Indiana, Ohio, Pennsylvania, New Jersey, and North including Canada.

All varieties listed in order of preference. Horizontal line opposite variety indicates most desirable flowering period.

Flowering Period Groups

	I	II	III	IV	III	II	I					
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WHITE												
SIERRA												
OHIO												
CITATION												
WHITE KNIGHT												
SNOWMAN												
APOLLO												
TWENTY GRAND												
PANAMA												
VIRGINIA												
DELAWARE												
UTAH												
JUNE BRIDE												
TEXAS												
WHITE SKIES												
YELLOW												
DOUBLOON												
WAR ADMIRAL												
VERMONT												
GOLDEN SPIKE												
SWAPS												
TAMPICO												
POT. YELLOW												
COLORADO												
DARK STAR												
BRONZE												
CORONADO												
CAVALCADE												
GALLANT FOX												
KANSAS												
RED												
BUCCANEER												
NAVAJO												
TENNESSEE												
PINK												
SPANISH LADY												
WINTERGREEN												
PINK ICE												
NATIVE DANCER												
INDIANA												
HERCULES												
FLORIDA												
PAN-AMERICAN												
SUMMER PINK												
MIAMI												
GAYTIME												
POT. PINK												
KENTUCKY												
ROSE												
ROSITA												
WISCONSIN												
JACKPOT												
TREASURE CHEST												
SHOWGIRL												
SUMMER JEWEL												
LAVENDER												
LAVENDER LADY												
ARIZONA												
SEÑORITA												

Prices all varieties on this page, each:

½ tr. pkt. (1000 seeds), \$2.25; tr. pkt. (2000 seeds), \$4.00.

Greenhouse Snapdragons (All are F₁ Hybrid varieties except as noted)

GROUP II

February 15 to May 10 and October 25 to December 10

WHITE

- Pike's Peak** (Ball). Strong growing white with slight ivory cast.
- **Snowman** (Ball). Excellent pure white. The most widely grown pure white for early spring.
- **Apollo** (Yoder Bros.). Ivory, yellow lip.
Margaret. Ivory. Very productive. ½ tr. pkt. of this inbred variety contains 2000 seeds, tr. pkt., 4000 seeds.
- Maryland White Improved** (Winkler). Pure white.
- Snowdrift**. (Inbred). Double flowering white. For high light intensity areas or spring growing only.
- **Twenty Grand** (Yoder Bros.). Ivory-white. Illus. page. 62.

YELLOW

- **Golden Spike** (Ball). Deep yellow with long spikes.
- Brokers Tip** (Yoder Bros.). Medium yellow, firm stems.
- Patricia** (J. S. Yoder). Medium yellow.
- Spartan Gold** (M. S. U.). Shatter-resistant medium yellow.
- **Swaps** (Yoder Bros.). Large yellow florets; compact spike. Illus. page 62.

BRONZE

- Indian Chief** (Ball). Scarlet-bronze.
- Barbara** (J. S. Yoder). Large flowered bronze with pink throat.
- **Gallant Fox** (Yoder Bros.). Medium rosy bronze. Very fine.
- Jubilee** (Winkler). Light golden bronze.
- Martha** (J. S. Yoder). Medium light honey-bronze. Tall and extra vigorous.
- Maryland Orange** (Winkler). Large-flowered rosy-bronze.
- Peach** (New — Pan-American). Large flowered pastel peach bronze. Fine novelty color.

RED

- **Navajo** (Ball). We consider this the finest all-purpose red Snap available. Illus. page 62.
- Maryland Red** (Winkler). Large, bright red.

LIGHT and MEDIUM PINK

- Flower Girl** (Ball). Long medium pink spikes carried on clean firm stems.
- **Hercules** (Ball). Beautiful light pink. Long spikes with clean, hard stems. Illus. page 62.
- Holiday** (Ball). Medium pink.
- **Pink Ice** (Ball). Bright pink with lighter lips. An excellent hard stemmed medium variety.
- Anne Marie** (J. S. Yoder). Clear pink.
- Chevy Chase Pink** (Winkler). Similar to Maryland Pink, but a shade darker.
- Christina** (J. S. Yoder). Popular light pink.
- **Indiana** (Yoder Bros.). A medium pink similar in color to the old variety, Dorcas Jane. Long spikes.
- Maryland Pink Imp.** (Winkler). Creamy light pink.
- **Native Dancer** (Yoder Bros.). One of the best light pinks for early spring and late fall.
- New York** (Yoder Bros.). Clear bright pink with slight yellow lip. Large spikes.
- Rosebud** (Yoder Bros.). Pleasing light pink. Clean growth.
- Top Flight** (Yoder Bros.). Light pink, similar to Christina.

ROSE

- Bridesmaid** (Ball). Medium rose with long spikes.
- Jackpot** (Ball). Medium deep rose, Firm stems carrying long spikes with excellently spaced florets.
- Rosanna** (Ball). A bright, deep rose with long spikes.
- Showgirl** (Ball). Medium dark rose. One of the best in its color class.
- **Treasure Chest** (Ball). Long tapering spikes of medium rose are carried on hard, clean stems. This is really an outstanding variety. Illus. page 62.
- Libby** (J. S. Yoder). Dark rose.
- Maryland Flamingo** (Winkler). Bright salmon-rose.
- Salmon Rose** (New — Pan-American). Dark salmon-rose. Large flowered, hard stem, good spikes; a novelty color.
- Spartan Rose** (M.S.U.). Medium deep rose.

LAVENDER and MAGENTA

- Lavender Lady** (Ball). A deep rosy lavender shade with excellent spikes and stems.
 - Maine** (Yoder Bros.). A rich purple.
 - Maryland Lavender** (Winkler).
- Prices all varieties on this page, each:**
½ tr. pkt. (1000 seeds), \$2.25; tr. pkt. (2000 seeds), \$4.00.

TABLE II VARIETIES FOR SOUTHERN U. S.

Alabama, Georgia, Mississippi, Louisiana and similar climates.

All varieties listed in order of preference. Horizontal line opposite variety indicates most desirable flowering period.

	Flowering Period Groups											
	II		III		IV		III		II			
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
WHITE												
SNOWMAN												
APOLLO												
TWENTY GRAND												
PANAMA												
VIRGINIA												
DELAWARE												
JUNE BRIDE												
POT. WHITE												
WHITE SKIES												
YELLOW												
GOLDEN SPIKE												
SWAPS												
TAMPICO												
POT. YELLOW												
COLORADO												
DARK STAR												
BRONZE												
GALLANT FOX												
KANSAS												
RED												
NAVAJO												
TENNESSEE												
PINK												
PINK ICE												
NATIVE DANCER												
INDIANA												
HERCULES												
FLORIDA												
MIAMI												
GAYTIME												
POT. PINK												
KENTUCKY												
ROSE												
JACKPOT												
TREASURE CHEST												
SHOWGIRL												
SUMMER JEWEL												
LAVENDER												
LAVENDER LADY												
ARIZONA												

GROUP III

May 10 to June 30 and September 10 to October 25

WHITE

Panama (Ball). Pure white. Illus. page 62.

Delaware (Yoder Bros.). Ivory-white. A late spring-early fall version of Citation.

Rockwood's White No. 7. Pure white.

Utah (Yoder Bros.). Pure white.

Virginia (Yoder Bros.). A vigorous paper-white. Long spikes and good stems.

YELLOW

Tampico (Ball). Medium yellow, good spike. Hard, clean stems. Illus. page 62.

Colorado (Yoder Bros.). Medium yellow, a shade lighter than Potomac Yellow. Uniform and vigorous.

Nevada (Yoder Bros.). Bright, intense yellow, deeper in color than Colorado and about two weeks earlier.

Pan American Summer Yellow. Shatterproof tall yellow.

Potomac Yellow (Winkler). Medium yellow.

BRONZE

Kansas (Yoder Bros.). A medium honey-bronze or Cavalcade color. Clean stems and long spikes.

RED

Tennessee (Yoder Bros.). Deep red with good stem. Crop failure. Available after August 5.

GROUP IV July 1 to September 10

WHITE

June Bride (Ball). The finest pure white for late spring thru early fall single stem greenhouse use. Shatterproof.

Crystal White, Ball Strain (Inbred). Our own growing. Quite similar to the Yoder strain. Later than summer hybrids.

Panama (Ball). Pure white.

Crystal White No. 2, Rockwood's (Inbred). Summer white. Later than summer hybrids.

Potomac White (Winkler). Summer flowering white.

Spartan Summer White (M.S.U.). Shatterproof pure white.

Texas (Yoder Bros.). Paper white. Illus. page 62.

White Skies (Yoder Bros.). A good white Snap for summer.

YELLOW

Tampico (Ball). Medium yellow, good spike. Hard, clean stems. Illus. page 62.

Dark Star (Yoder Bros.). A deep yellow with good spikes and hard stems.

Potomac Yellow (Winkler). Medium yellow.

Rockwood's Yellow No. 11. Bright yellow.

Rockwood's Summer Yellow (Inbred). Fairly deep yellow. Later than summer hybrids.

BRONZE

Rockwood's Summer Orange (Inbred). Bright orange-bronze.

LIGHT and MEDIUM PINK

Florida (Yoder Bros.). Light pink. A summer flowering Christina color with long spikes.

Pan American Summer Pink. Shatter-resistant pink. Christina color. Illus. page 62.

Spartan Summer Pink (M.S.U.). Shatter-resistant light pink.

LAVENDER and MAGENTA

Arizona (Yoder Bros.). This summer flowering lavender is a significant improvement over Rockwood's Lavender-Rose.

Tucson (New — Pan-American). Medium lavender. Clean stem; good spike.

NOTE: Prices of all greenhouse Snap varieties in Groups I, II, III and IV on pages 62, 63, 64 and 65 are, each . . .
1/2 tr. pkt. (1000 seeds), **\$2.25**; tr. pkt. (2000 seeds), **\$4.00**.

60° WINTER SNAPS

Many year 'round Mum growers have expressed an interest in a crop of late winter Snaps, but are obliged to grow them in houses with Mums, which means 60° nights. Preliminary tests have indicated that those varieties belonging to Group III (normally used for May-June flowering) may be flowered satisfactorily from late January through late March at 60° in northern greenhouses. Regular winter-early spring (Group I and Group II) varieties are **not** satisfactory at this temperature.

If interested, we suggest that you try it on a small scale the first year. See July 1960 GROWER TALKS or write our Grower Service Department for more information.

RED

Potomac Red (Winkler). Solid dark red, large spike.

Rockwood's Summer Red (Inbred).

LIGHT and MEDIUM PINK

Miami (Ball). Medium pink, good spike. Hard, clean stems.

Florida (Yoder Bros.). Light pink. A summer flowering Christina color with long spikes. Illus. page 62.

Gaytime (Yoder Bros.). Medium pink, yellow lip.

Kentucky (Yoder Bros.). Light pink with slight yellow lip. Lighter than Potomac Pink.

Potomac Pink (Winkler). Excellent medium pink.

Rockwood's Summer Pink No. 2. A shade lighter pink than Rockwood's Summer Pink No. 1.

ROSE

Potomac Rose (Winkler). Rose counterpart of Potomac Pink.

Rockwood's Summer Pink No. 1 (Inbred). Medium rose. Later than summer hybrids.

Summer Jewel (Yoder Bros.). Same color as Rockwood's Summer Pink No. 1, but a Hybrid. Later than summer hybrids.

LAVENDER and MAGENTA

Calcutta (New — Pan-American). Deep bright magenta.

Rockwood's Lavender-Rose (Inbred).

Rockwood's Summer Orchid (Inbred). Darker than Rockwood's Lavender-Rose.

Outdoor Snaps for Spring Plant Sales

ANNUAL

(*Antirrhinum majus*)

180,000 S. 1-2 Wks. 65-75°



ROCKET SNAPS. Their F₁ Hybrid breeding provides All-America award winning Rocket Snaps with extra vigor. The above left photo shows a typical first flush of blooms from this remarkable Snap. On the right top of next page we show a bed of Rocket Mixed photographed at West Chicago August 1, right after Field Day, 1962.

This is the **second** crop of blooms from these plants, which bloomed first in mid-June from a February 1 sowing planted out early May. Your customers can easily harvest two crops — possibly three — of garden flowers from these vigorous Snaps. Greater gardening satisfaction and increased sales will result.

For the very best in bedding Snaps use the Hybrids. You will find they branch and bloom more freely, are more uniform in color and habit, and have that extra strength and vigor of the true F₁ hybrid. Earliest of the hybrids is "Hit Parade" closely followed by the new intermediate "Vacationland" and a bit later the All-America award winning "Rockets."

The Dwarf (*Nanum Grandiflorum*) type is bushy, with no tend-

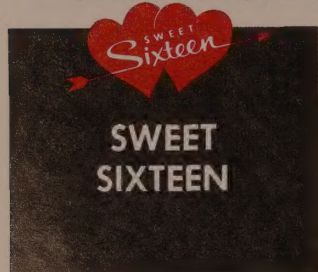
ency to sprawl if not supported. The taller varieties should be supported, if straight stems are wanted.

IMPORTANT: Extra early sowing (weeks before most annuals are sown), and hardening them off in cold frames before selling is a "must," if real quality summer Snaps are to be had. Try it this year!

HYBRID ROCKETS

2½ to 3 ft. Stems and Spikes of the Rockets are the finest we've ever seen on outdoor Snaps. Two crops of first class cut flowers can be cut each summer, if well established plants are put out by June 1. The absolute "tops" in Snaps for outdoor bedding plant sales or cut-flower use.

Rocket Bronze **Rocket Rose** **Rocket Orchid** **Rocket Pink**
Rocket Yellow (Golden) **Rocket Red** **Rocket White**



ROCKET MIXTURE

A Sweet Sixteen Selection for 1963. A carefully formulated blend of the above colors. The breeder of this important All-America Award winning strain has kept blooming dates and heights of various colors as close to one another as possible.

Prices above 8, each: tr. pkt. (500 seeds), **\$1.75**; 1/128 oz., **\$3.00**; 1/8 oz., **\$5.50**; 1/4 oz., **\$10.00**; 1/2 oz., **\$19.25**; 3/8 oz., **\$36.50**; 1/2 oz., **\$69.50**; 1 oz., **\$132.00**; 1 oz., **\$252.00**.

Rocket Collection 7 tr. pkts., one of each color, for **\$11.00**.

HYBRID HIT PARADE SNAPS

1½ to 2 ft. For all-purpose bedding Snaps, these genuine F₁ Hybrids are especially adapted to bedding conditions. You'll have earlier flowers and more of them on bushy plants. Ball Orig. Seed.

Memory. Medium pink.

Temptation. Crimson-red.

Stardust. Bright yellow.

Sophisticated Lady. Lavender.

Mexicali Rose. Deep rose.

Harvest Moon. Orange-bronze.

Bob White. Creamy white.

Hit Parade Mixture. Formula mixture of above colors. Early blooming with plenty of flowers all season.

Prices above 8, each: tr. pkt. (500 seeds), **\$1.35**; 1/128 oz., **\$2.25**; 1/8 oz., **\$3.50**; 1/4 oz., **\$6.25**; 1/2 oz., **\$12.00**; 3/8 oz., **\$22.75**; 1/2 oz., **\$43.50**.

Hit Parade Collection. 7 tr. pkts., 1 of each color, for **\$8.50**.



Rocket Snapdragons photographed at West Chicago August 2, 1962.

F₁ HYBRID VACATIONLAND

This new series of Snaps is intermediate in season between the very early Hit Parade and Midseason Rockets. Combines many of the best features of both — freedom of bloom, comeback crops, long spikes, long firm stems and great vigor. For the best in a new early bedding Snap use "VACATIONLAND." Ball Orig. Seed.

Glacier. White

Sequoia. Red.

Grand Canyon. Pink.

Sun Valley. Yellow.

Great Smoky. Lavender.

Waikiki. Rose.

Las Vegas. Bronze.

Vacationland Mixture.

Prices above 8, each: tr. pkt. (500 seeds), **\$1.75**; 1/128 oz., **\$3.00**; 1/64 oz., **\$5.50**; 1/32 oz., **\$10.00**; 1/16 oz., **\$19.25**; 1/8 oz., **\$36.50**; 1/4 oz., **\$69.50**; 1/2 oz., **\$132.00**; 1 oz., **\$252.00**.

Vacationland Collection. 7 tr. pkts., one of each color, for **\$11.00**.

Torch (New). This variety offers for the first time in F₁ bedding Snaps a new exciting color — scarlet rose. Brilliant in color, early in flowering (in season with Vacationland), vigorous and strong in its growth habit. A "must" addition to every grower's list. Tr. pkt. (500 seeds), **\$1.75**; 1/128 oz., **\$3.00**; 1/64 oz., **\$5.50**; 1/32 oz., **\$10.00**; 1/16 oz., **\$19.25**; 1/8 oz., **\$36.50**; 1/4 oz., **\$69.50**; 1/2 oz., **\$132.00**; 1 oz., **\$252.00**.



Jiffy-Potted Snaps for outdoor bedding use mean longer stems and better spikes because of unchecked growth.

VACATIONLAND. Vacationland Snaps are somewhat earlier blooming than Rockets, on medium length stems, making them largely wind and weather resistant. They also come back fast for

a second crop. Vigorous growth and long spikes are imparted to this strain by its F₁ Hybrid origination.

WHITE

BRONZE

YELLOW

67
PINK



OUTDOOR SNAPS for Spring Plant Sales (continued)

8 BEST GIANTS OF CALIFORNIA

Average height 32 in.

- Alaska.** Ivory-white.
- Canary Bird.** Rich yellow.
- Cattleya.** Orchid-lavender.
- Copper Queen.** Shades of bronzy copper.
- Cherry Red.** Rosy cerise-red.
- Crimson (Padre).** Deep crimson. Dark leaves and stems.
- Pinkie.** Lighter than Rosalie.
- Rosalie.** A rich deep rose.
- Improved California Mixture.** Mixture of the best tall varieties.

Prices above 9, each: tr. pkt. ($\frac{1}{8}$ oz.), **45c**; $\frac{1}{4}$ oz., **\$1.25**; 1 oz., **\$3.75**.

COLLECTION: We offer one tr. pkt. each of the 8 Best named varieties above for **\$3.35**.

TETRA SNAPS

Tetraploid Snaps or "Tetras" have larger florets with thicker petals and foliage than the ordinary kind. Under good growing conditions really outstanding spikes can be developed. Average height 30 in.

- Crimson.** Bright crimson-red.
- Pink.** Salmon-pink; huge florets.
- Rose.** Bright rose.
- White.** Light creamy white, changing to pure white with age.
- Yellow.** Clear yellow; large flowers.
- Prices above 5, each: tr. pkt. ($\frac{3}{8}$ oz.), **50c**; $\frac{1}{8}$ oz., **95c**; $\frac{1}{8}$ oz., **\$1.50**; $\frac{1}{4}$ oz., **\$2.75**; 1 oz., **\$8.25**.
- **Giant Ruffled "Tetra" Mixture** of all colors. Tr. pkt. ($\frac{3}{8}$ oz.), **40c**; $\frac{1}{8}$ oz., **75c**; $\frac{1}{8}$ oz., **\$1.20**; $\frac{1}{4}$ oz., **\$2.25**; 1 oz., **\$6.75**.

COLOSSAL SNAPS

This inbred strain is extra vigorous, producing strong, long-stemmed spikes of large, well formed florets. One of the best outdoor strains for cutting. Orig. Seed. Average height 36 in.

- Velvet Giant (Red)** • **Mixture** of all colors. Prices above 2, each: tr. pkt. ($\frac{3}{8}$ oz.), **35c**; $\frac{1}{8}$ oz., **\$1.10**; $\frac{1}{4}$ oz., **\$2.00**; 1 oz., **\$6.00**.

STOKESIA (Stokes Aster)

PERENNIAL (S. cyanea) 3300 S. 4-6 weeks 65-75°

Cyanea. 20 in. Large blue flowers. Tr. pkt. ($\frac{1}{8}$ oz.), **75c**; $\frac{1}{4}$ oz., **\$1.35**; 1 oz., **\$4.00**.

STRELITZIA (Bird of Paradise)

ANNUAL (S. reginae) 3-4 weeks 65-75°

Regina. Exhibition strain. Giant flowers of dark blue and deep orange. 10 seeds, **\$1.25**; 100 seeds, **\$10.00**.

STREPTOCARPUS (Cape Primrose)

ANNUAL (S. hybridus) 750,000 S. 2-3 weeks 65-75°

- **Wiesmoor Hybrids.** Fringed, Orchid-like flowers 4 to 5 inches across in a bright array of colors, including shades of pink, red, blue, lilac and white. Sow from October to March for cut flowers or pot plants from April to December. Originator's tr. pkt., **\$1.25**; 5 tr. pkts., **\$5.25**.

Sunflower. See Helianthus, page 29.

Sweet William. See Dianthus, page 25.

HALF DWARF (Nanum Grandiflorum)

Compact plants for bedding. Average height 16 in.

- Black Prince.** Deep velvety crimson. Dark leaves and stems.
- Gloria.** Uniformly dwarf, deep rose-pink.
- Golden Queen.** Rich golden yellow.
- Purity.** Large flowered creamy white.
- St. George.** Flashing orange-cerise.
- Mixture** (Rust-Resistant). All colors. Ideal for bedding.
- Prices above 6, each: tr. pkt. ($\frac{3}{8}$ oz.), **50c**; $\frac{1}{8}$ oz., **85c**; $\frac{1}{4}$ oz., **\$1.50**; 1 oz., **\$5.50**.

(F)HYBRID DOUBLE SNAPS

Good spikes of ruffled, double flowers on robust stems make this class quite wind resistant. Since Vanguard became an A.A.S. winner, 3 other colors have been added to make up an important outdoor class.

- Highlife.** Cream with yellow lip.
- Super-Jet.** Clear, mid-yellow.
- Vanguard.** Medium rose-pink with yellow lip.
- Venus.** Soft pink with yellow lip.
- Prices above 4, each: tr. pkt. (500 seeds), **\$1.40**; $\frac{1}{128}$ oz., **\$2.50**; $\frac{1}{8}$ oz., **\$4.50**; $\frac{3}{8}$ oz., **\$8.50**; $\frac{1}{8}$ oz., **\$16.00**.

OTHER VARIETIES

"Panorama" Formula Mixture. 30 in. A bright mixture produced from F₁ Hybrid parents, representing the F₂ or second generation. Possesses some of the desirable vigor of a true F₁ Hybrid, but at a lower seed cost. Tr. pkt. ($\frac{3}{8}$ oz.), **55c**; $\frac{1}{8}$ oz., **\$1.45**; $\frac{1}{4}$ oz., **\$5.00**; 1 oz., **\$15.00**.

Majestic Mixture. 20 in. All colors. Extra large flowered. Tr. pkt. ($\frac{1}{8}$ oz.), **45c**; $\frac{1}{4}$ oz., **\$1.25**; 1 oz., **\$3.75**.

- **Magic Carpet** (Tom Thumb). 6 in. The uniformly dwarf and compact habit of this superior mixture makes it an excellent bedding and border plant. Try some this year for a pleasant surprise. Tr. pkt. ($\frac{1}{8}$ oz.), **50c**; $\frac{1}{4}$ oz., **\$1.50**; 1 oz., **\$4.50**.

SNAPS in the new Jiffy-Strip and Poly-Tray make an easily handled bedding plant unit.

SWEET PEAS. See page 69.

THUNBERGIA

ANNUAL (T. species) S. See below 2-3 weeks 65-75°

- **Alata** (Black-Eyed Susan). 1100 S. Excellent used as a climber or as a trailing plant for porch boxes and urns. Makes a dense growth producing an abundance of flowers in shades of yellow, buff and orange — some with black centers or "eyes."

Tr. pkt. ($\frac{1}{8}$ oz.), **35c**; $\frac{1}{4}$ oz., **60c**; 1 oz., **\$1.80**.

Gibsoni. 500 S. Flowers of a solid, deep orange are twice the size of Alata. 100 seeds, **\$1.75**; 1000 seeds, **\$15.00**.

TITHONIA

ANNUAL (T. rotundifolia) 3500 S. 2-3 weeks 65-75°

Torch. 3 ft. Single, bright orange-scarlet flowers with yellow "eyes" are carried on erect, bushy plants. Makes a good cut flower. Stands heat well.

Tr. pkt. ($\frac{1}{8}$ oz.), **40c**; $\frac{1}{4}$ oz., **\$1.50**; 1 oz., **\$4.50**.

Tobacco Plant. See Nicotiana, page 38.



ZVOLANEK'S MULTIFLORA SWEET PEA

BALL SWEET PEAS

ANNUAL (*Lathyrus odoratus*)

350 S. 2 weeks 65-75°

WINTER PEAS (Standard Winter Varieties)

These varieties are at their best during winter and early spring from a July to September sowing. While we prefer the Spring Flowering varieties for late greenhouse planting, the Winter Class does flower earlier and in some sections is preferred, even for outdoor planting.

- | | |
|--|--|
| Ball Blue Supreme. Rich mid-blue. | Fiesta. Brilliant scarlet-cerise. |
| Ball Orange Supreme. Clear orange. | Hiawatha. Deep rose. |
| Ball Rose Queen. Clear rose-pink. | Rhapsody. Deep rosy lavender. |
| Ball Rose Supreme. Silvery rose. | Triumph. Rich lilac-mauve. |
| Ball Salmon. Medium salmon. | Twilight. Clear lavender. |
| Cascade. White-seeded white. | |
| Ball Florist Mixture. Formula mixture of the best colors. | |

Prices above 12, each: ½ oz., **35c**; 1 oz., **60c**; 4 ozs., **\$1.75**; 1 lb., **\$5.00**.

SPRING PEAS (Cuthbertson Strain)

For spring greenhouse flowering, don't sow before October. Outdoors they are a week or two earlier than the Summer class and more heat resistant.

- Billy.** Cerise-rose.
Ruth. Deep rose-pink.
Evelyn. Soft salmon-pink.
Lois. Light rose-pink.
Jimmy. Rich, deep cherry-red.
Frank G. Rosy lavender.
Tommy. Clear mid-blue.
Daisy. White, black seeded.
Mixture. Balanced according to demand for each color.

Prices above 21, each: ½ oz., **35c**; 1 oz., **60c**; 4 ozs., **\$1.75**; 1 lb., **\$5.00**.

ZVOLANEK'S MULTIFLORAS

Unusually free-flowering and **long-stemmed**, with many stems carrying **5 and 6 flowers**. Sow from mid-July through November for blooms November through May.

- | | |
|--|---|
| Blue Wonder. Clear, medium blue. | Red. Christmas-red. |
| Geo. J. Ball. Deep coral-rose. | Rose. Medium rose. |
| Giant Lilac. Bright mauve. | Salmon-Pink. Large flowers. |
| Lavender. Orchid-lavender. | Whirlwind. Light rose. |
| Light Rose-Pink. Flesh-pink. | White. Pure white. |
| Orange-cerise. Bright and striking. | Multiflora Mixture. A complete color assortment. |

ZVOLANEK'S FLORIBUNDAS

ORIGINATOR'S SEED

Our trials definitely indicate that the Floribundas are superior to other strains for spring greenhouse or outdoor use in our locality.

- | | | | |
|-------------------|------------------|-------------------|-----------------|
| Pure White | Rose-Pink | Light Pink | Lavender |
| Mid-Blue | Scarlet | Mixture | |

Prices above 7, each: ½ oz., **70c**; 1 oz., **\$1.25**; 4 ozs., **\$4.50**; 1 lb., **\$14.00**.

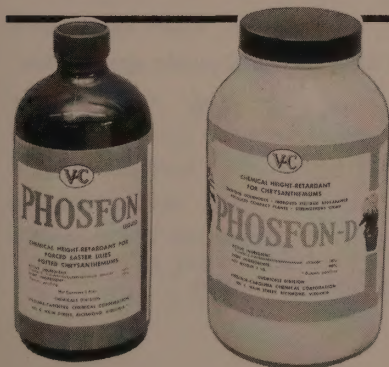
SUMMER PEAS

Sow in 3-inch Jiffy-Pots in late winter. Grow cold after germination and plant out in early spring as soon as soil can be worked. The Cuthbertson varieties are also superior for summer flowering.

- Ball Best Mixture.** Only the best summer varieties.
 ½ oz., **25c**; 1 oz., **40c**; 4 ozs., **\$1.25**; 1 lb., **\$4.00**.

DWARF SWEET PEAS

Little Sweethearts Mixture. Plants are upright and form rounded bushes about 8 in. high covered with large flowers in all shades. Needs no support and is suitable for borders or bedding. ¼ oz., **85c**; 1 oz., **\$2.50**; 4 ozs., **\$7.50**.



PHOSFON-D

The Proven Height Retardant for Mums

Successfully employed by a great many commercial growers in the production of better proportioned, more compact pot Mums. With shorter internodes, stems are strengthened and foliage improved. Equally effective for garden type Mums.

Now available in either liquid or powder form.

Price for 1 pint bottle liquid or 1 lb. jar powder (state which), **\$17.95**

Case of 12, either liquid or powder (state which), **\$190.00**

One pint liquid or 1 lb. powder treats 3,000 to 5,000 pots of Mums.

F.O.B. West Chicago, Ill.

TORENIA

ANNUAL (T. Fournieri) 375,000 S. 2 weeks 65-75°
An excellent plant for spring combination use, bedding in semi-shade and shade. Sow several weeks ahead of other bedding plants.

- **Fournieri Grandiflora.** 12 in. Rich, deep blue with violet and yellow blotch on lip.

Fournieri Compacta, Blue. 8 in. A dwarf form of above.

Fournieri Compacta, White. 8 in. Dwarf pure white.

Prices above 3, each: tr. pkt. ($\frac{1}{8}$ oz.), **35c**; $\frac{1}{4}$ oz., **\$1.50**; $\frac{1}{2}$ oz., **\$2.70**.

TRITOMA (Red Hot Poker)

PERENNIAL (Kniphofia Uvaria) 20,000 S. 3-4 weeks 65-75°
3 to 4 ft. Attractive long spikes from late summer until frost. Dig and store roots over winter in North.

- **Pfizer's Red.** Large brilliant red.
Tr. pkt. ($\frac{1}{8}$ oz.), **35c**; $\frac{1}{4}$ oz., **90c**; 1 oz., **\$2.65**.

TROLLIUS (Globe Flower)

PERENNIAL (T. Ledebouri) 30,000 S.

Allow seed to stand outdoors over winter for good germination or soak in hot water 30 minutes before sowing. Require moist soil.

Ledebouri, Orange. 2 ft. The standard variety.
Tr. pkt. ($\frac{1}{8}$ oz.), **45c**; $\frac{1}{4}$ oz., **\$1.25**; $\frac{1}{2}$ oz., **\$2.25**.

VERBENAS. See page 71.

VINCA (Periwinkle)

ANNUAL (V. rosea) 21,000 S. 2-3 weeks 65-75°

SOW	SPACE	FLOWER
Jan.	12 x 12 in.	June to frost.

Vincas are natives of Madagascar, hence the common name Madagascar Periwinkle, or just "Periwinkle." Vincas germinate slowly and need to be started early in a 65-75° temperature. They are best handled in Jiffy-Pots and should be grown on at 55-60° to avoid checked growth. They are excellent border and bedding plants, and thrive under hot, dry conditions.

- **Coquette.** More compact and shapely than the regular Vinca varieties, Coquette will grow only 10 inches tall, is very uniform, and is an ideal bedding plant, because it is tolerant of hot and dry summers. Color is rosy pink with attractive, glossy deep green leaves. Pictured below.
Tr. pkt. ($\frac{1}{8}$ oz.), **45c**; $\frac{1}{4}$ oz., **\$1.35**; 1 oz., **\$4.50**; 4 ozs., **\$13.50**.

Bright Eye. Of the same ideal dwarf habit as Coquette except for its sparkling white flowers with red eyes. Pictured below.
Tr. pkt. ($\frac{1}{8}$ oz.), **85c**; $\frac{1}{4}$ oz., **\$2.50**; 1 oz., **\$7.50**; 4 ozs., **\$22.50**.



VINCA BRIGHT EYE (left) and COQUETTE

VINCAS (Cont'd)

The following 5 varieties will average 15-18 inches in height.

- **Twinkles.** Soft pink; red eye. **Alba Oculata.** White; red eye.
 - **Pink.** Medium pink. **Mixture.**
 - Alba Pura.** Pure White.
- Prices** above 5, each: tr. pkt. ($\frac{1}{8}$ oz.), **30c**; $\frac{1}{4}$ oz., **70c**; 1 oz., **\$2.00**; 4 ozs., **\$6.00**; 1 lb., **\$18.00**.
- Rose Carpet.** Has all the good bedding plant qualities of the regular rose-pink Vinca, but the plants are dwarf and spreading rather than upright. Under good conditions each plant will cover the ground for about 2 feet. Also useful as a trailing plant in boxes or baskets.
Tr. pkt. ($\frac{1}{8}$ oz.), **65c**; $\frac{1}{4}$ oz., **\$1.75**; 1 oz., **\$5.00**; 4 ozs., **\$15.00**.

VIOLA

PERENNIAL (V. cornuta) 24,000 S. 2-3 weeks 65-75°
8 in. Miniature Pansies. Extra free flowering and effectively used for bedding. Perfectly hardy.

Jersey Gem. Deep orchid; large flowered and attractive.
Tr. pkt. ($\frac{1}{8}$ oz.), **60c**; $\frac{1}{4}$ oz., **\$1.10**; $\frac{1}{2}$ oz., **\$2.00**; 1 oz., **\$6.00**; 1 lb., **\$11.00**.

- **Arkwright Ruby.** Maroon with dark center. Bright color.
- **Blue Perfection.** Large flowered clear medium blue.
- **Chantreyland.** Extra large flowered true apricot.
- **Lutea Splendens.** Clear golden yellow.
- **White Perfection.** Showy pure white.
- **Scottish Mixture.** Mostly solid colors in shades of white, yellow, blue and purple. Larger blooms than our Formula Mixture.

Formula Mixture. Mixture of large-flowered varieties.

Prices above 7 varieties, each: tr. pkt. ($\frac{1}{8}$ oz.), **60c**; $\frac{1}{4}$ oz., **\$1.10**; $\frac{1}{2}$ oz., **\$2.00**; 1 oz., **\$6.00**; 4 ozs., **\$18.00**.

"JUMP-UPS"

43,000 S. These small, but free flowering Violas make excellent bedding and rock garden plants, blooming continuously from early spring to late fall.

- **Blue Elf** (Improved Johnny-Jump-Up). Three-colored blooms of deep violet, light blue and gold are freely produced on low-growing plants.
- **Helen Mount.** A richly colored combination of violet, lavender and canary-yellow. Very free-flowering with narrow bushy foliage.

Prices above 2, each: tr. pkt. ($\frac{1}{8}$ oz.), **60c**; $\frac{1}{4}$ oz., **\$1.35**; $\frac{1}{2}$ oz., **\$2.50**; 1 oz., **\$7.50**; 4 ozs., **\$22.50**.

ODORATA. 9000 S. The popular fragrant "English Violet."

Semperflorens. Deep blue.

Tr. pkt. ($\frac{1}{8}$ oz.), **70c**; $\frac{1}{4}$ oz., **\$2.00**; 1 oz., **\$6.00**.

WALLFLOWER

ANNUAL (Erysimum) 14,000 S. 2 weeks 65-75°

2½ ft. Good bedding plant or cut flower in cool climates. Sow in December and grow in shallow soil spaced 4 x 4 for spring cutting.

Gold Standard. Richly fragrant deep golden yellow flowers borne in spikes. Tr. pkt. ($\frac{1}{8}$ oz.), **65c**; $\frac{1}{4}$ oz., **\$2.25**; 1 oz., **\$6.50**.

Perennial Wallflower. See Cheiranthus, page 18.

YUCCA (Spanish Bayonet)

PERENNIAL (Y. aloifolia) 1800 S. Frost germinator

Hardy Varieties, Mixture. Striking plants of exotic appearance. Many varieties are included in this blend.

Tr. pkt. ($\frac{1}{8}$ oz.), **50c**; $\frac{1}{4}$ oz., **\$1.50**; 1 oz., **\$4.50**.

ZINNIAS.

See pages 72-76.

The dot (•) indicates varieties most dependably satisfactory in our experience and observation.

Verbenas

ANNUAL (V. hortensis)

10,000 S.

3-4 weeks

65-75°

SOW
Feb.-Mar.

SPACE
See below

FLOWER
July to frost.

Verbenas are one of the most popular American native flowers, and today's varieties range from dwarf forms that should be spaced about 6 in. to taller, spreading types that need 12-18 in. of room. Germination is not rapid and usually 50-60% is considered a good "stand." A Feb. sowing will provide good 3 to 4 in. pot plants for spring sales. For Pak Sales, sow mid-Mar.

NOTE: Verbenas, by the nature of their growth, divide themselves into two rather distinct classes. The **SPREADING** type is inclined to be procumbent or carpet-like, covering a fairly wide area. The **UPRIGHT** type is free branching, but distinctly bushy and upright in habit rather than spreading. Under each of these classes we have listed two sub-classes, namely: Spreading varieties under 12 inches in width and those over 12 inches; Upright varieties under 8 inches in height and those over 8 inches.

SPREADING. 8 to 12 inches.

Calypso. A novelty blend of striped and blotched types in many bright colors.

Dazzle. A solid scarlet-red in the so-called Sparkle class; quite compact and low.

- **Delight.** Coral-pink, suffused salmon. Dwarf spreading.

- **Sparkle.** Bright red with white eye. Dwarf spreading.

Crystal. Large flowered, snow-white. Dwarf spreading.

Splendor. Deep reddish purple with contrasting white eye.

Sparkle Mixture. Plants of the same type as the above 3 in a complete range of colors, mostly with white eyes.

Prices above 7, each: tr. pkt. ($\frac{1}{8}$ oz.), **60c**; $\frac{1}{4}$ oz., **\$1.75**; 1 oz., **\$5.00**; 4 ozs., **\$15.00**; 1 lb., **\$58.00**.



VERBENA IDEAL FLORIST STRAIN

• IDEAL FLORIST STRAIN

A Sweet Sixteen Selection for 1963. Low growing, but spreading in habit with large flowers in an extremely wide range of unusual colors — many attractive light eyes. Early and free flowering. Fine for flat sales. Pictured right. Tr. pkt. ($\frac{1}{8}$ oz.), **75c**; $\frac{1}{4}$ oz., **\$2.00**; 1 oz., **\$6.00**; 4 ozs., **\$18.00**; 1 lb., **\$54**.

**SWEET
SIXTEEN**

SPREADING. 12 to 24 inches.

- **Torrid.** Deep red with contrasting white eye. Bred in the Middle West for heat resistance, and blooms freely under trying conditions. Ball Orig. Seed.

Tr. pkt. ($\frac{1}{8}$ oz.), **\$1.00**; $\frac{1}{4}$ oz., **\$3.00**; 1 oz., **\$8.85**; 4 ozs., **\$25.00**.

- **Defiance.** Scarlet-red with small white eye. The most vigorous and free flowering of all scarlet Verbenas. Stands heat well.

- **Beauty of Oxford.** Extra large flowers, ranging from clear rose-pink to deep rose-red, all with slight white eye.

Ellen Willmott. Extra large, salmon pink.

Lavender Glory. Very fine, large flowered lavender with white eye. About 75% true to type, balance white and purple.

- **Marilyn.** Fiery scarlet-cerise with creamy eye.

Mayflower. Shades of pink.

- **Pure White.** Very even strain. Large flowered and vigorous.

- **Royale.** Large flowered, deep violet-blue with eye.

Spectrum Red. Very bright rich scarlet with no eye.

- **Sutton's Blue.** Deep royal blue without eye.

- **Grandiflora Mixture** of all colors in the spreading class.

Prices above 11, each: tr. pkt. ($\frac{1}{8}$ oz.), **45c**; $\frac{1}{4}$ oz., **\$1.25**; 1 oz., **\$3.75**; 4 ozs., **\$11.00**; 1 lb., **\$42.00**.

UPRIGHT. 4 to 8 inches.

Creamy White. A creamy white, about 4-8 inches tall, which will go nicely with Fireball.

Fireball. Bright, fiery scarlet, small flowers.

Prices above 2, each: tr. pkt. ($\frac{1}{8}$ oz.), **65c**; $\frac{1}{4}$ oz., **\$2.00**; 1 oz., **\$6.00**; 4 ozs., **\$18.00**.

UPRIGHT. 8 to 14 inches.

Firelight. A vivid, solid red.

- **Giant Salmon Queen.** Large flowered, bright coral-salmon.

Starlight. Large flowers are a rich mid-blue with ivory-white eye. An excellent companion to Salmon Queen.

Snowball. Fine free flowering pure white.

Prices above 4, each: tr. pkt. ($\frac{1}{8}$ oz.), **50c**; $\frac{1}{4}$ oz., **\$1.30**; 1 oz., **\$4.00**; 4 ozs., **\$11.50**; 1 lb., **\$45.00**.

- **Rainbow Mixture.** Semi-dwarf (8 to 10 in.), but upright growing plants in a wide assortment of colors. Its earliness and erect habit make this strain valuable for pots and combination boxes as well as for borders.

Tr. pkt. ($\frac{1}{8}$ oz.), **55c**; $\frac{1}{4}$ oz., **\$1.75**; 1 oz., **\$5.00**.

MISCELLANEOUS

Venosa Lilacina. 60,000 S. 8 to 10 in. Flowers continuously throughout our hot Midwestern summers. Deep lilac flowers. Tr. pkt. ($\frac{1}{8}$ oz.), **35c**; $\frac{1}{4}$ oz., **\$1.00**; 1 oz., **\$3.00**.

Zinnias... A new day is dawning!

For years bedding plant growers have considered Zinnias "poor cousins" when compared to popular fast sellers like Petunias and Salvia. And when you consider the ordinary varieties and cheap seed of the past, it was an easy thing for the home owner to buy a 25¢ packet of "mixed Zinnias," sow it himself outside and get a few plants, so why buy plants?

Today's new F₁ Hybrids, Tetras and the unique new dwarf All-America Winner, Thumbelina are changing all this — fast. Retail seed costs are too high for most home gardeners to take the chance, which means more money for you with properly started, sure-to-grow plants in Paks and Jiffy-Pots.

Important points to remember in producing quality Zinnia plants are: don't sow too early (four weeks before selling time is about right); and grow them in a 60° night temperature to avoid yellowed leaves. Plants will, of course, not be in flower this quickly, but an earlier sowing to induce flowering will result in unsalably tall growth. An exception is the extra dwarf Thumbelina which may be sown a month earlier to have plants in bloom for Pak sales.

Cash in on this increasing demand for Zinnia plants next spring. *GROW THEM AND SELL THEM IN PAKS!*





Zinnia Thumbelina



ALL-AMERICA SELECTIONS

Here's a "natural" for the bedding plant grower. Flowers early in packs or pots, remains extra dwarf in habit — your customers will find it ideal for edging. It has a good range of Zinnia colors and keeps a good show of bloom throughout the season. We observed in our trials last summer that the foliage and new blooms seem to keep covering up old blooms as the plant matures, resulting in a sort-of self-renewing effect.

But there is a very special reason why you should plant for a

heavy Thumbelina demand this year. It's the first Gold Medal All-America Winner in eleven years. Therefore, it will be the subject of a regular barrage of advertising and publicity by both the All-America Committee and the originator.

So be ready for plenty of Thumbelina business. 6000 seeds per oz. Tr. pkt. ($\frac{1}{8}$ oz.), 85¢; $\frac{1}{4}$ oz., \$1.50; $\frac{1}{2}$ oz., \$2.75; $\frac{3}{4}$ oz., \$5.00; 1 oz., \$15.00; 4 ozs., \$45.00; 1 lb., \$135.00.

Zinnias

ANNUAL (*Z. elegans*) 2500-4000 S. 1-2 weeks 65-75°

For Bedding: Each year more home gardeners are buying Zinnia plants instead of sowing their own. Be ready for this business by having plenty of "Pak" or flat-grown plants ready for them. Remember, though, they're fast growers, so don't sow until about a month before your bedding plant selling season starts.

Warning: Zinnias will not germinate or grow satisfactorily in less than a 65° temperature.

For Cutting: Sow direct in warm soil, flowering will begin in 7 or 8 weeks. An outdoor sowing as late as July 1 in our latitude will produce a fine crop of cut Zinnias before frost.

DAHLIA-FLOWERED or GIANT MAMMOTH (2-3 ft.)

WHITE and CREAM

Isabellina. Creamy yellow.

- **Purity** (Polar Bear). The best white in large-flowered Zinnias.

YELLOW AND GOLDEN

- **Canary Bird** (Daffodil Imp.). A bright, clear canary-yellow.
- **Golden Dawn** (Golden Queen). Clear golden-yellow. Extra large flowers.
- **Oriole** (Orange King). Orange and gold.

LAVENDER and PURPLE

- **Dream** (Lavender Queen). An attractive lavender.
- **Purple Prince** (Violet Queen). Deep purple; large-flowered.

PINK and ROSE

- **Pink Lady.** Shrimp-pink centers and creamy buff outer petals. Tr. pkt. (1/8 oz.), **50c**; 1/4 oz., **85c**; 1 oz., **\$2.65**; 4 ozs., **\$7.35**; 1 lb., **\$22.00**.
- **Exquisite** (Enchantress). Fine, light rose with deep cerise center.
- **Illumination** (Rose Queen). Deep rose, dark center. Darker than Exquisite.
- **Luminosa** (Brightness). Bright pink suffused with salmon.
- **Miss Willmott.** Pleasing soft pastel pink.
- **Eldorado** (Salmon Queen). Luminous salmon-rose.

RED and SCARLET

- **Cherry Queen.** Brilliant cherry-rose.
 - **Crimson Monarch.** Large-flowered, deep crimson-red.
 - **Meteor.** Rich, deep amaranth-red.
 - **Scarlet Flame** (Will Rogers, Scarlet Queen). Bright scarlet.
- Prices** all Dahlia-Flowered Zinnias (**except Pink Lady**), each: 1/4 oz., **45c**; 1 oz., **\$1.35**; 4 ozs., **\$4.00**; 1 lb., **\$12.00**.

DAHLIA FLOWERED MIXTURES

Gold Medal Mixture. We believe this is the finest complete mixture of large-flowered Zinnias available. This is not a field-grown mixture, but it is carefully blended by formula from first class cut-flower colors and varieties in direct proportion to their popularity. Pictured below.

- **Pastel Shades Mixture.** A formula mixture of the lighter colors in the large-flowered class.

Giant Mammoth Mixture. A balanced mixture of all Giant Mammoth varieties.

COLLECTION: We offer a collection consisting of 1/4 oz. each of named Dahlia Flowered varieties (**except Pink Lady**). 16 pkts. for **\$7.25**.



GOLD MEDAL MIXTURE ►



ZINNIA REDMAN, All-America Selection for 1962.

GIANT CACTUS

2 to 3 ft. This class, with its large curled and ruffled petals has gained wide popularity.

Red Man ALL-AMERICA SELECTION 1962. Large, brilliant red cactus-flowered variety with long stems. An All-America Selections award winner for 1962. Pictured at left.

Tr. pkt. ($\frac{1}{8}$ oz.), **70c**; $\frac{1}{4}$ oz., **\$1.25**; $\frac{1}{2}$ oz., **\$2.25**; 1 oz., **\$8.00**.

Rosie O'Grady. Large, double, deep rose shading to soft rose toward the outer petals.

Tr. pkt. ($\frac{1}{8}$ oz.), **60c**; $\frac{1}{4}$ oz., **\$1.65**; 1 oz., **\$5.00**; 4 ozs., **\$14.50**.

Apricot. Coral suffused apricot.

• **Blaze**. A brilliant combination of fiery mandarin-red and scarlet-orange. Unique and distinct.

• **Cherry Time**. Large, ruffled flowers in shades of cerise and cherry-red.

Eskimo. Large, loosely ruffled flowers open creamy white, turning a clear white with age.

• **Floradale Scarlet**. Large, fully double scarlet flowers.

Ice Cream. A completely different color in Zinnias. A rich, full bodied cream—not a light yellow. Blends with all other colors. Large, fully double flowers with ruffled petals.

Lilac Time. Shades of lavender.

Riverside Beauty. Large, double, soft coral-rose color.

• **Sunny Boy**. Large buttercup-yellow flowers.

• **Cactus Flowered Mixture**. One of our finest Zinnia blends. Extra large, fully double flowers with large ruffled petals. A nicely balanced mixture of colors.

Prices above 10, each: $\frac{1}{8}$ oz., **40c**; $\frac{1}{4}$ oz., **65c**; 1 oz., **\$1.75**; 4 ozs., **\$5.15**; 1 lb., **\$15.25**.

• **Treasure Island**. This is an F_3 strain with hybrid vigor and large, fluffy, informal flowers up to 7 inches across in shades of red, orange and yellow. About 3 ft. tall. Tr. pkt. ($\frac{1}{8}$ oz.), **40c**; $\frac{1}{4}$ oz., **\$1.10**; 1 oz., **\$3.25**; 4 ozs., **\$10.00**.

F, HYBRIDS HYBRID

Polypink. Compact plants bearing a profusion of medium sized, clear pink, semi-Cactus flowers which tend to mass and cover the foliage.

Trail Blazer. Medium large, double and semi-double flowers of brilliant red with bright yellow centers. This Hybrid Zinnia is **highly resistant to mildew** which sometimes affects other Zinnias.

Prices above 2, each: tr. pkt. ($\frac{1}{8}$ oz.), **90c**; $\frac{1}{4}$ oz., **\$3.25**; 1 oz., **\$12.00**.

LILLIPUTS

18 in. Flowers about 2 inches across on bushy, rounded plants.

• **Canary Gem**

• **Pink Gem**

• **Lilac Gem**

• **Salmon Gem**

• **Scarlet Gem**

White Gem

• **Rosebud**

• **Formula Mixture**. Popular mixture of all colors in the Lilliput class.

Prices above 8, each: $\frac{1}{4}$ oz., **45c**; 1 oz., **\$1.35**; 4 ozs., **\$4.00**; 1 lb., **\$12.00**.

COLLECTION: $\frac{1}{4}$ oz. each of the 7 named Lilliput varieties for **\$3.15**.

PUMILAS

"CUT-AND-COME-AGAIN." Between the Giants and Lilliputs in flower size and height.

Canary-Yellow

• **Salmon-Rose**. Particularly nice.

Pinkie. Soft pink.

Fireball. Scarlet

Snowball. White.

Mixture of all colors.

Prices above 6, each: tr. pkt. ($\frac{1}{8}$ oz.), **30c**; $\frac{1}{4}$ oz., **50c**; 1 oz., **\$1.50**; 4 ozs., **\$5.00**; 1 lb., **\$15.00**.

Firecracker (New). ALL-AMERICA SELECTION 1963.

Large flowered brilliant scarlet red with quilled cactus type petals. Plants break very freely and are extremely vigorous.

Tr. pkt. ($\frac{1}{8}$ oz.), **\$2.25**; $\frac{1}{4}$ oz., **\$4.00**; $\frac{1}{2}$ oz., **\$7.00**; 1 oz., **\$21.00**.

MAKE SURE YOU CAPITALIZE ON THE SWING TO ZINNIAS IN PAKS OR IN JIFFY-POTS . . . There will be more money for you with properly started, sure-to-grow Zinnias in 1963 — THE ZINNIA YEAR

ZINNIAS continued on next page.

Zinnias (continued)

MISCELLANEOUS VARIETIES

- **Cupid Mixture.** Dwarf, 12-in. plants producing large numbers of small double (1-in.) flowers. Good color range. Fine for borders and rock gardens. Tr. pkt. ($\frac{1}{8}$ oz.), **35c**; $\frac{1}{4}$ oz., **60c**; 1 oz., **\$1.80**.

Halo. A Haageana type Zinnia of uniformly dwarf growth, bearing a profusion of $1\frac{1}{2}$ inch, single flowers of dark mahogany-red with a bright contrasting "halo" border of golden yellow. Tr. pkt. ($\frac{1}{8}$ oz.), **50c**; $\frac{1}{4}$ oz., **\$1.50**; 1 oz., **\$4.50**.

Linearis. A heat-resistant, free-blooming subject for edging and rock garden work. Compact (6-8 in.), early flowering with single, bright orange flowers. Tr. pkt. ($\frac{1}{32}$ oz.), **50c**; $\frac{1}{4}$ oz., **\$1.50**; 1 oz., **\$4.50**.

- **Merry-Go-Round.** Reselected Orig. Seed. Cactus and semi-Cactus type flowers, 3 to 4 inches across are borne freely on 12 to 18-inch, dwarf plants. Half the flowers are sharply bicolored with the outer $\frac{1}{3}$ of each petal being in contrast to the petal base. All colors, with petals tipped in white or gold. Tr. pkt. ($\frac{1}{8}$ oz.), **75c**; $\frac{1}{8}$ oz., **\$1.25**; $\frac{1}{4}$ oz., **\$2.00**; 1 oz., **\$6.00**; 4 ozs., **\$18**.

- **Peppermint Stick.** Bright and varied colors in shades of red, white, yellow, pink, orange and purple, more than half of which are attractively striped. Tr. pkt. ($\frac{1}{8}$ oz.), **35c**; $\frac{1}{4}$ oz., **75c**; 1 oz., **\$2.25**; 4 ozs., **\$7.00**.

Ortho-Polka. Similar to Peppermint Stick but larger flowered. Tr. pkt. ($\frac{1}{8}$ oz.), **35c**; $\frac{1}{4}$ oz., **75c**; 1 oz., **\$2.25**; 4 ozs., **\$7.00**.

- **Persian Carpet.** 16 in. Compact plants literally covered with medium small, double flowers in variegated shades of maroon, gold and orange. Especially valuable for bedding. Tr. pkt. ($\frac{1}{8}$ oz.), **50c**; $\frac{1}{4}$ oz., **\$1.50**; 1 oz., **\$4.50**.

Fantasy Mixture. Formula mixture of all colors in this class. The medium sized flowers have informally curled and twisted petals which produce an attractive novelty effect. Tr. pkt. ($\frac{1}{8}$ oz.), **30c**; $\frac{1}{4}$ oz., **60c**; 1 oz., **\$1.80**.

Old Mexico ALL-AMERICA SELECTION 1962. 12 inches. Mahogany and gold. Nice, large flowered, heat resistant variety. Illus. below. Tr. pkt. ($\frac{1}{8}$ oz.), **90c**; $\frac{1}{4}$ oz., **\$2.70**; 1 oz., **\$8.00**; 4 ozs., **\$26.65**.

CREEPING ZINNIA (Sanvitalia)

ANNUAL (S. procumbens) 50,000 S. 1-2 weeks 65-75°

Procumbens (Creeping Zinnia). 4 to 6 in. A very fine, dwarf border plant with many small yellow flowers. Tr. pkt., **30c**; $\frac{1}{4}$ oz., **90c**; 1 oz., **\$2.70**.



STATE FAIR MIXTURE. Largest flowered Zinnia available.

ZINNIA OLD MEXICO. 1962 All-America Selection.

STATE FAIR

This is the world's first Tetraploid Zinnia in a complete range of colors, and is the largest flowered Zinnia in existence. Being a Tetraploid, with thicker leaves and stockier growth than regular types, the small plants present a much better appearance in "Paks" or flats for bedding plant sales.

Bright Scarlet Shades (New). Light scarlet.

Scarlet Shades (New). Medium to dark.

Golden Yellow Shades (New). Deep shades of yellow, almost orange.

Lavender and Purple Shades (New). Deep lavender and light to dark purple shades.

Orange Shades (New).

Pink Shades (New). Light to dark pink.

Rose and Salmon Shades (New).

Yellow Shades (New). Sulphur, lemon and canary yellow shades.

State Fair Mixture. A Sweet Sixteen Selection for 1963.

Prices last 9, each: $\frac{1}{8}$ oz., **35c**; $\frac{1}{4}$ oz., **95c**; 1 oz., **\$2.75**; 4 oz., **\$8.00**; 1 lb., **\$24.00**.



BURPEE BIG BOY TOMATO. The most popular Hybrid. See page 81.

Ball's Superior Vegetable Seeds



Plan now to include a well balanced variety of quality vegetable plants in your bedding plant program next spring. Select your varieties with care, grow them to perfection, and watch your sales climb.

The Jiffy-Pot symbol marks the varieties best suited for plant sales. We recommend growing them in Jiffy-Pots for superior quality and more profit; however, they may be grown in Veneer Bands, Market-Paks, or other containers. See index for complete list.

BALL F₁ HYBRID VEGETABLE COLLECTION OF TABLE TREATS

A collection of the finest F₁ Hybrid Vegetables. Try these outstanding varieties in Jiffy-Pots for sale along with your spring bedding plants. For complete descriptions, see the following pages. Each collection contains:

- $\frac{1}{16}$ oz. **Tomato, Ball Extra Early**
- $\frac{1}{16}$ oz. **Tomato, Ball Giant Hybrid** (Midseason)
- $\frac{1}{16}$ oz. **Tomato, Burpee Big Boy** (Late)
- $\frac{1}{4}$ oz. **Cabbage, Flat Top** (O-S Cross)
- $\frac{1}{16}$ oz. **Brussel Sprouts, Jade Cross**
- 100 seeds **Cucumber, Ball Early**
- $\frac{1}{8}$ oz. **Eggplant, Beauty Hybrid**
- 1 oz. **Squash, Blackini**
- $\frac{1}{4}$ oz. **Watermelon, Dixie Queen Hybrid**

COLLECTION, \$12.40

Catalog Value, \$13.80

SAVE \$1.40

BEANS

	4 ozs.	1 lb.	5 lbs.
Bountiful. 47 days. Green bush	\$0.30	\$0.90	\$3.00
Golden Wax. 51 days. Yellow bush.....	.30	.90	3.00
Fordhook No. 242 (New). 75 days. Best all-around Lima; heavy yields under all conditions	.30	.90	3.00
Top-Crop. 48 days. Green pencil pod, bush	.30	.90	3.00

BEETS

(1 oz. for 60-ft. row). Sow when ground can be worked and make successive sowings until July. Space rows 18 inches.

	1 oz.	4 ozs.	1 lb.
Detroit Dark Red (Improved Strain). 60 days	\$0.25	\$0.60	\$1.80
Ruby Queen. 52 days. Short top; fine color and taste	.30	.90	2.70

SEE PAGE 81 FOR OTHER HYBRID TOMATOES

BROCCOLI



(About 10,000 seeds per oz.). Sow in March. Space plants 36 x 24 in.

Green Sprouting. Early strain. Valuable all-season "cut and come again" strain for home garden or market

1 oz.	4 ozs.	1 lb.
\$0.50	\$ 1.50	\$ 4.50

BRUSSELS SPROUTS



(About 7000 seeds per oz.). Sow in March. Space 36 x 18 in. For fall crop, sow in mid-June.

Long Island Imp. 90 days. Stem closely set with 1½ in., round Cabbage-like heads. 20 in. tall, good keeper

.60	2.00	6.00
-----	------	------

Jade Cross **HYBRID** The most prolific variety ever produced. 1½ oz., 90c; ¼ oz., \$2.75

8.80	24.00	—
------	-------	---

CABBAGE



(About 7000 seeds per oz.). Sow in Feb.-March for the first crop and in June for a fall crop. Space earlies 24 x 18 in., lates 36 x 20 in.



F₁ HYBRID CABBAGE

Once you use Hybrid Cabbage, you will always want it. These varieties are listed in order of maturity, and all yield the most satisfying, uniform heads available. All originated by the famous Takii Co. of Japan.

Emerald Cross **ALL-AMERICA SELECTION** 1962. Earlier than Golden Acre or Copenhagen Market. More uniform and heavier.

¼ oz., \$1.50	\$4.00	\$12.00	\$36.00
---------------	--------	---------	---------

Flat Top (O-S Cross) Very large midseason variety. Uniform heads. ¼ oz., \$1.25

3.20	10.60	32.00
------	-------	-------

Swellhead (N-S Cross—New) 95 days. Best late Hybrid. Very hard, 6 lb. heads. Stands long without bursting; heads form when young and keep growing. Small core and well-blanching interior.

¼ oz., \$1.25	3.20	10.60	32.00
---------------	------	-------	-------

YELLOWS RESISTANT VARIETIES. In order of maturity.

Jersey Queen. 63 days. The resistant Jersey Wakefield. Heads are solid, conical

.70	2.00	6.00
-----	------	------

Golden Acre Resistant. 65 days. Resistant Golden Acre type. Medium small, round heads

.75	2.50	7.50
-----	------	------

Marion Market. 80 days. Heads a little later and larger than Copenhagen Market

.70	2.00	6.00
-----	------	------

Wisconsin All-Season. 90 days. Good winter keeper; large, flat, hard heads

.70	2.00	6.00
-----	------	------

Bugner. 110 days. Round heads; average 10 lbs. 8 inches diameter. Excellent

.75	2.50	7.50
-----	------	------

STANDARD VARIETIES. In order of maturity.

Copenhagen Market. 67 days. A very choice strain. Medium sized heads; compact

.50	1.50	4.50
-----	------	------

Early Dwarf Flat Dutch. 85 days. Heads nearly round, firm; fine flavor and high quality

.50	1.50	4.50
-----	------	------

Late Flat Dutch. 100 days. Good keeper. Firm heads

.50	1.50	4.50
-----	------	------

Danish Ballhead. 105 days. Penn State strain (short stem). Best late variety, heads large, flat, solid; keeps until late spring

.50	1.50	4.50
-----	------	------

RED CABBAGE

Mammoth Rock Red. 100 days. Best red variety

1 oz.	4 ozs.	1 lb.
\$0.70	\$ 2.00	\$ 6.00

CARROT

(1 oz. for 300-ft. row). Sow as early as the ground can be worked and make successive plantings until Aug. 1st. Space rows 12 to 18 in.

Amsterdam Forcing. Roots reddish orange, 6 in. uniformly tapered. Earliest

.45	1.40	4.20
-----	------	------

Danvers Half Long. Tapering

.30	.90	2.70
-----	-----	------

Gold Pak. Long and smooth (8 to 10 in.), bred especially for commercial growers

.45	1.40	4.20
-----	------	------

CAULIFLOWER



(About 7000 seeds per oz.). Sow Feb.-March. To insure unchecked growth and sure heading, plants should be handled in plant bands or pots. Space 18 x 24 in.

Early Snowball "A." 55 days. Standard early. Fine for greenhouse forcing, frame or outdoor culture.

Snowball "X." 65 days. Well adapted for use under a wide range of conditions. Heads large, firm and pure white.

Prices of above 2, each: 1½ oz., 40c; ¼ oz., \$1.00; 1 oz., \$3.00; 4 ozs., \$9.00; 1 lb., \$27.00.

CELERY



(1 oz. makes about 8000 plants). Sow in Feb. or March for plant sales. Cover seeds lightly. Space 6 x 28 in. Days indicated are from date of planting.

Golden Yellow Self-Blanching. Cornell No. 19. Long deeply rounded stalks. Yellows resistant.

Summer Pascal. 110 days. Uniform, thick, rounded stalks. Better than Giant Pascal. Crisp, green.

Prices above 2, each: ½ oz., 85c; 1 oz., \$1.50; 4 ozs., \$5.00.

CHIVES



(Grass-Onion). A perennial, quickly started from seed. Popular for flavoring and borders.

¼ oz., 45c; 1 oz., \$1.35; 4 ozs., \$4.00; 1 lb., \$12.00.

CORN

Gold Crest. **HYBRID** 70 days. New, wilt-resistant, high quality, early yellow hybrid.

4 ozs., 40c; 1 lb., 95c; 5 lbs., \$4.00.

Golden Cross. **HYBRID** 85 days.

4 ozs., 35c; 1 lb., 85c; 5 lbs., \$3.50.

CUCUMBER



(About 1000 seeds per oz.). 1 oz. for 80 hills or 200-ft. row. Distance between rows 3 to 6 ft.

Ball Early Hybrid. **HYBRID** Heavy yielder. Size similar to "Straight 8," color dark green. It is a white-spined, slicing type, earlier than Burpee Hybrid. Resistant. Excellent under glass. 100 seeds, 60c; ¼ oz., \$1.75; 1 oz., \$5.40; 4 ozs., \$16.00; 1 lb., \$48.00.

Seedless Supreme. Best European forcing type. Will outyield any outdoor variety. Forms 12-14 in. fruits without pollination, is seedless unless pollinated. Dark green, disease-resistant, very prolific when forced in high humidity at 75-85° temperature. 100 seeds, 50c; ¼ oz., \$1.50; 1 oz., \$4.50.

	1 oz.	4 ozs.	1 lb.
Chicago Pickling. 6 in. 60 days	\$0.30	\$0.85	\$2.50

Straight 8. Deep green; early slicer	.35	1.00	3.00
---	-----	------	------

EGGPLANT



(About 6000 seeds per oz.). Sow in February or March for plant sales. Space plants 18 x 24 in.



Beauty Hybrid. **HYBRID** A highly productive F₁. Fruits slightly smaller than Black Beauty. Midseason. Very firm and of good color. 1/8 oz., \$1.40; 1/4 oz., \$2.50; 1/2 oz., \$4.00; 1 oz., \$7.50.

NEW EGGPLANT WHITE BEAUTY

	1 oz.	4 ozs.	1 lb.
Black Beauty. Popular market variety. Dark purple. Broad, egg-shaped. 1/2 oz., 55c	\$1.00	\$3.00	\$9.00
Fort Myers Market. Oval fruits carried well above ground. Quite resistant to disease and excessive heat. 1/2 oz., 60c;	1.10	3.20	9.60
New Hampshire Early. Medium sized, oval fruits bred for northern climate. Prolific. 1/2 oz., 60c	1.10	3.20	9.60
White Beauty. A creamy white, large, oval-shaped Eggplant. Disease-resistant. Can be sold as a good novelty. Illus. above. 1/4 oz., 50c; 1/2 oz., 90c	1.60	4.50	—

HERBS — cash in on the demand



Home gardeners can't resist "Jiffy-Stripped" herbs in plastic Jiffy-Trays — an ideal unit of sale for these increasingly popular herbs.

HERBS



An assortment of Herbs, ready for sale in Ball PlanTrays, makes an ideal merchandising package. Or for the customer who wants to have more of one kind, have flats of 12 to 25 plants of one kind ready. Leaflets describing each variety with collection offers.

Anise	Basil (Lettuce-leaved)	Borage
Coriander	Dill	Sweet Fennel
Prices above 7, each: tr. pkt., 20c; 1 oz., 60c.		Savory

KOHLRABI

(About 7000 seeds per oz.)

Early White Vienna. Standard sort for forcing and home garden. Globe-shaped.

1 oz.	4 ozs.	1 lb.
\$0.40	\$1.25	\$3.75

LETTUCE

(15,000 seeds per oz.; 1/4 oz. for 100-ft. row). Lettuce PLANTS are readily transplanted in plant bands. Sow March 15 or 4 weeks before setting out plants. Space 14 x 18 in.

LOOSE-LEAF VARIETIES

Grand Rapids Forcing. Mildew-resistant. Best early	.35	1.00	3.00
Salad Bowl. Early (45 days,) stands summer heat very well	.70	2.00	6.00

HEAD VARIETIES

Great Lakes. Outstanding; slow to bolt; resistant to tip burn. Widely adapted ..	.70	2.00	6.00
Imperial No. 456 (Cornell). Sure heading in summer, muck and upland. Resistant to tip burn and early bolt	.70	2.00	6.00
Pennlake. An early Iceberg type. Withstands heat. Medium head	.70	2.00	6.00

BUTTERHEAD VARIETIES

Bibb Forcing. Finest flavor. Demands even temperature	.35	1.00	3.00
Buttercrunch (New) ALL-AMERICA SELECTION 1963. New variety of Kentucky Bibb from Cornell University. Quite compact, heavy, butterhead; crisp, but juicy. Will bolt about 10 days after regular type. Should replace regular Bibb. 1/4 oz., 70c; 1/2 oz., \$1.25	2.35	7.00	—



Sweet Marjoram	Sage	Oregano (The Pizza Herb)
Prices above 3, each: tr. pkt., 20c; 1/2 oz., 60c.		
Thyme	Rosemary	
Prices above 2, each: tr. pkt., 20c; 1/4 oz., 60c.		

COLLECTIONS

Tr. pkt. each of above 12 Herbs	\$2.00
See also Chives, page 78; Parsley, page 80; and Basil, page 12.	

MELON

MUSKMELON (Cantaloupe)



(1000 seeds per oz.).

	1 oz.	4 ozs.	1 lb.
Golden Delight. Large, early. Hard shell, small seed cavity	\$ 0.40	\$ 1.20	\$ 3.50
Honey Rock. 85 days. Flesh orange, sweet, and of finest flavor. Fusarium resistant. Good shipper	.40	1.20	3.50
Super Market. HYBRID 85 days. Thick, deep salmon flesh of excellent flavor; an exceptionally heavy yielder. Resistant to fusarium and downy mildew. 100 seeds, \$1.75; ¼ oz., \$4.75	14.00	42.00	120.00

WATERMELON

New Hampshire Midget. Early	.35	1.20	3.50
Dixie Queen Hybrid. HYBRID 82 days. 30-50 lbs. Light green skin with narrow dark green stripes. Deep red flesh with fine sweet flavor. Resistant to fusarium and wilt. ¼ oz., \$1.50; ½ oz., \$2.40	4.20	13.00	—

ONION



(About 9000 seeds per oz.)

Early Harvest (U.S.D.A.) HYBRID Will compete with Onion sets in making mature Onions. Light yellow, globe shaped. ½ oz., 80c	1.40	4.50	14.00
Riverside, Utah Strain (Yellow Sweet Spanish). Globe-shaped. ½ oz., 40c	.70	2.30	6.90
Yellow Bermuda. Standard early. Flat, straw colored. ½ oz., 40c	.70	2.30	6.90
White Portugal. All-purpose variety. Fine for sets, pickling, bunching, and mature Onions. ½ oz., 40c	.70	2.30	6.90

PARSLEY



(¼ oz. per 100 ft. row). Roots are transplanted from outside to 4-in. pots or ground bed in cool house, or sow directly, 8 x 8 in.

Extra Triple Curled. 75 days. Closely curled, very compact and productive ...	.35	1.00	3.00
--	-----	------	------

PARSNIP

(1½ ozs. per 100-ft. row). Sow early, space rows 18 in. Roots hardy.

Short, Thick. 100 days. Finest and earliest strain. Pulls easily, sweet delicate flavor	.25	.70	2.10
--	-----	-----	------

PEAS

	4 ozs.	1 lb.	5 lbs.
Freezonian. 62 days. Medium	\$0.30	\$ 0.90	\$ 3.00
Little Marvel. 64 days. Dwarf	.30	.90	3.00

PEPPER



(About 4000 seeds per oz.). Sow 6 weeks before outdoor planting. Germinate seeds warm. Space plants 16 x 24 in. Days indicated are from date plants are set out.

	½ oz.	1 oz.	4 ozs.	1 lb.
California Wonder Select (Sweet) 72 days. Standard of excellence in Sweet Peppers. Extra thick walls ..	\$0.50	\$0.95	\$2.70	\$ 8.20
Chinese Giant (Sweet). 80 days. The largest Sweet Pepper	.70	1.35	4.00	12.00
Golden Wonder. 68 days. Golden fleshed. California Wonder type ...	.70	1.35	4.00	12.00
Hungarian Yellow Wax (Hot). 68 days. Tapering, 6½ in. long. Very early. Plants small, productive ...	.50	1.00	3.00	9.00
Long Red Cayenne (Hot). 74 days. For pickles, canning or drying	.50	.95	2.75	8.20
Merrimack Wonder (Mild). 68 days. Thick flesh. Use where growing season is short, sets in cold weather ..	.70	1.35	4.00	12.00

PEPPERS (Cont'd)

	½ oz.	1 oz.	4 ozs.	1 lb.
Oakview Wonder (Sweet). 65 days. (Early California Wonder)	\$0.70	\$1.35	\$4.00	\$12.00
Pimento Perfection (Sweet). 75 days. Fruits smooth, heart-shaped	.50	1.00	3.00	9.00
Red Chili. 84 days. Numerous 2-2½ in. long fruits. Borne upright. Very pungent	.50	1.00	3.00	9.00
Ruby King (Sweet). 68 days. Very productive	.50	1.00	3.00	9.00
Sunnybrook or Cheese (Sweet). 70 days. Tomato-shaped fruits. Turn scarlet-red earlier than most other peppers	.70	1.35	4.00	12.00
Sweet Banana (Sweet Hungarian). 70 days. Tapering, 6½ in. long	.50	1.00	3.00	9.00
Sweet Bull Nose (Sweet Mountain). 65 days. Mild-fleshed	.50	.95	2.70	8.20
World Beater (Sweet). 70 days. Large, oblong, green, thick flesh ...	.70	1.35	4.00	12.00
Vinedale (Sweet). 62 days. Somewhat tapered, thick fleshed, extra early. Best for northern climates ..	.70	1.35	4.00	12.00
Yolo Wonder (Sweet). 70 days. Mo-saic resistant	.50	1.00	3.00	9.00

PUMPKIN

(About 110 seeds per oz.)

	1 oz.	4 ozs.	1 lb.
Small Sugar Pie. Early orange	\$0.25	\$0.85	\$2.50
Large Yellow or Connecticut Field	.25	.85	2.50

RADISH

(1 oz. for 100 ft. row.)

Cherry Belle. 23 days. Round, red and very crisp. We sell the originator's high quality strain. Finest of all	.25	.50	1.50
Early Scarlet Globe (Short Top). 23 days. An ideal florists "catch crop"	.25	.45	1.35
Iceberg. 27 days. Best white for outdoors and forcing	.25	.45	1.35

SPINACH

(1 oz. for 100 ft. row.)

Giant Thick-Leaved (Nobel). 45 days ..	.25	.40	1.20
New Zealand (Tetragonia). Picked throughout the summer. Suitable for greenhouse forcing in 50-60° temperature	.25	.40	1.20

SQUASH (About 380 seeds per oz.)

Blackini. HYBRID Good looking dark green Zucchini type. Ready in 50 days from setting out, when cylindrical fruits are 6-8 inches long. Very productive; fine flavor and texture	.90	3.00	9.00
Butternut. 100 days. Winter Squash	.40	1.25	3.75
Early Prolific Straightneck. 50 days. Summer Squash. Edible when 4 to 14 in.	.30	1.00	3.00
Hercules (New) VAL-AMERICA SELECTION 1963. An improved Butternut. Large, with thick, solid, straight neck. Very productive; good flavor	.90	2.40	7.20

SWISS CHARD

(1 oz. for 100 ft. row.)

Lucullus. Deep green crumpled leaves. Cool house temperature. Pick leaves	.25	.75	2.25
---	-----	-----	------

TURNIPS

Just Right. HYBRID The best combination type Turnip ever. Heavy cut leaf foliage with smooth, white, globe-shaped roots. ½ oz., 60c	1.00	3.00	—
Purple-Top, White Globe	.25	.40	1.25

F₁ Hybrid Tomatoes for Outdoor Growing



(From 5200-9500 seeds per oz.). Sow seed 6 to 8 weeks before time to plant out. Days indicated are from date plants are set out. Most of these varieties are adapted to a wide area of the U. S.

Ball Extra Early. 55 days. An F₁ Hybrid earlier than Earliana. Medium fruits, extremely smooth, globe shaped. Bred for highest quality fruit and earliness. Record yields. $\frac{3}{4}$ oz., \$1.00; $\frac{1}{8}$ oz., \$2.25; $\frac{1}{4}$ oz., \$7.50; 1 oz., \$25.00; 4 ozs., \$82.00.

Ball Giant Hybrid. Early, red, large fruits. Deep globe. It is about one week later than our Ball Extra Early. $\frac{3}{4}$ oz., \$1.00; $\frac{1}{8}$ oz., \$2.50; $\frac{1}{4}$ oz., \$8.50; $\frac{1}{2}$ oz., \$16.00; 1 oz., \$30.00; 4 ozs., \$98.00.

Burpee Hybrid. 70 days. Deep globe shaped. Average 8 ounces, holds size. $\frac{3}{4}$ oz., \$1.00; $\frac{1}{8}$ oz., \$2.00; $\frac{1}{4}$ oz., \$6.00; $\frac{1}{2}$ oz., \$11.00; 1 oz., \$21.00; 4 ozs., \$65.00.

Burpee Big Early. Mid-early, 62 days. Large ($\frac{1}{2}$ lb.) globe-shaped fruits of bright scarlet. $\frac{3}{4}$ oz., \$1.00; $\frac{1}{8}$ oz., \$2.50; $\frac{1}{4}$ oz., \$8.50; $\frac{1}{2}$ oz., \$16.00; 1 oz., \$30.00; 4 ozs., \$98.00.

Burpee Big Boy Hybrid®. 78 days. Fruit to 2 pounds. The most popular hybrid Tomato. $\frac{3}{4}$ oz., \$1.00; $\frac{1}{8}$ oz., \$2.50; $\frac{1}{4}$ oz., \$8.50; $\frac{1}{2}$ oz., \$16.00; 1 oz., \$30.00; 4 ozs., \$98.00.

Pa. 103. 70 days. Red fruited, averaging 5 ounces. Resistant to fusarium wilt, grey leafspot, early blight. Well adapted to East, Central, South and Southwestern U. S. $\frac{3}{4}$ oz., \$1.00; $\frac{1}{8}$ oz., \$2.00; $\frac{1}{4}$ oz., \$6.00; $\frac{1}{2}$ oz., \$11.00; 1 oz., \$21.00; 4 ozs., \$65.00.

Wonder Boy. 80 days. Extremely large, red, quality Tomatoes of excellent flavor; quite prolific. $\frac{3}{4}$ oz., \$1.00; $\frac{1}{8}$ oz., \$2.50; $\frac{1}{4}$ oz., \$8.50; $\frac{1}{2}$ oz., \$16.00; 1 oz., \$30.00; 4 ozs., \$98.00.



Tiny Tim. 13,000 S. A novel miniature Tomato that can be raised as a colorful, small pot plant in the home. Ideal appeal to the housewife as she can add a touch of color to her wintertime menus and have a plant at the same time. Special instructions with each order. $\frac{1}{8}$ oz., 40c; $\frac{1}{4}$ oz., \$1.35; 1 oz., \$4.00; 4 ozs., \$12.

SPECIAL FORCING VARIETIES

Michigan-Ohio Hybrid **X(HYBRID)** CALIFORNIA GROWN. 8400 S. Cross between Michigan State Forcing and Ohio WR-7. Red, medium large, globe-shaped, high quality fruits. Fusarium wilt resistant. More productive in northern winter months than other varieties. Has also found good use for southern forcing. $\frac{3}{4}$ oz., \$1.25; $\frac{1}{8}$ oz., \$3.30; $\frac{1}{4}$ oz., \$11.00; 1 oz., \$33.00.

Michigan-Ohio Hybrid **X(HYBRID)** GREENHOUSE GROWN (New). 8400 S. Finest seed available, most uniform and highest returns. $\frac{3}{4}$ oz., \$1.80; $\frac{1}{8}$ oz., \$6.00; $\frac{1}{4}$ oz., \$15.00; 1 oz., \$50.00.

Michigan State Forcing (Inbred). Wilt-resistant. Deep scarlet fruits, average 5-6 ozs., globular, in large clusters. $\frac{1}{8}$ oz., 50c; $\frac{1}{4}$ oz., \$1.50; 1 oz., \$4.50.

Ohio WR-7 (New — Inbred). Wilt-resistant, deep globe shaped. Averages 7 ozs. Pink. Good for fall forcing and spring. Use this in place of the older WR-3. $\frac{1}{8}$ oz., 50c; $\frac{1}{4}$ oz., \$1.50; 1 oz., \$4.50.

Tuckcross O, Forcing (Tucker's Forcing X Ohio WR-7). 8400 S. **X(HYBRID)** Red fruited. Average size 5.7 ounces. One of the line of F₁ Hybrids developed especially for forcing by Prof. Lambeth of Missouri. Fruits are smooth, meaty. Highly disease resistant. Well adapted to growing in plastic houses. $\frac{3}{4}$ oz., \$1.25; $\frac{1}{8}$ oz., \$3.30; $\frac{1}{4}$ oz., \$11.00; 1 oz., \$33.00.

Waltham Mold-Proof Forcing (Inbred). Even sized, 4 oz. scarlet fruits, firm, good shippers, do not crack. Early. Immune to leaf mold. $\frac{1}{8}$ oz., 50c; $\frac{1}{4}$ oz., \$1.50; 1 oz., \$4.50.



Robert Kautz of Terre Haute, Indiana, left, and Bud Dunn, Ball representative, admiring the fruit set on a crop of greenhouse Tomatoes.

Superior Tomato Seed—Standard Varieties

Our seed is contract-grown by America's most reliable sources in disease-free areas. For F₁ Hybrid varieties and forcing, as well as special kinds, refer to preceding page.

The first four words in each description mean the following, in order:

RECOMMENDED AREA SEASON OF MATURITY SIZE
SHAPE

These are the Tomato Shapes to which we refer:



OBULATE

DEEP OBULATE

GLOBE

DEEP GLOBE

All varieties are red or crimson except where noted.

	½ oz.	1 oz.	4 ozs.	1 lb.
Bonny Best. General — early — medium — globe	\$0.55	\$1.05	\$3.10	\$ 9.20
Break O'Day. East — midearly — medium — globe. Meaty and firm, sets in cold weather, wilt resistant .	.60	1.10	3.30	9.90
Caro-Red. East — midseason — medium — deep oblate. Orange red, contains 10 times normal amount of Vitamin A	.95	1.85	5.50	16.40
Crimson Cushion. General — late — large — oblate. Firm and meaty, a home garden standard	.70	1.35	4.00	11.90
Earliana. General — extra early — medium — deep oblate	.55	1.00	2.95	8.80
Fireball. East — first extra early — medium — deep oblate. Very compact growth, for market and can- nery. Can be planted 1½ feet apart in the row	.80	1.55	4.50	13.40
Firesteel. East — early — medium — globe. Smooth and productive, wilt resistant	.55	1.05	3.15	9.40
Giant Tree (Italian Potato leaved). General — late — large — oblate. Firm and meaty crimson fruits, can be trellised to 15 ft. high. ⅞ oz., 50c; ¼ oz., \$1.20	1.90	3.60	12.00	—
Glamour. Northeast and Midwest — early — medium — deep oblate. Solid and crack resistant	.60	1.10	3.30	9.90
Gulf State Market. South — midsea- son—medium—globe. Smooth, firm, pink fruits with crack resistance ...	.55	1.00	2.95	8.80
John Baer. General — early — me- dium — globe	.55	1.05	3.10	9.20
Jubilee. General — midseason — me- dium large — globe to deep globe. Non-acid. Orange yellow	.60	1.10	3.30	9.90
Manalucie. South — midseason — medium large — deep globe. Resist- ant to blossom end rot, leaf mold, early blight, grey leaf spot and fusa- rium wilt. Has been successfully used in the East and Midwest	.55	1.05	3.15	9.40
Marglobe Supreme. General — mid- season — medium — globe. All time, all-purpose favorite	.55	1.00	2.95	8.80
Oxheart. General — late — very large — heart shaped. Firm and meaty with thick walls. Very mild	.80	1.55	4.50	13.40
Pinkshipper. East — midseason — medium — globe. Best smooth and firm pink, resistant to wilt	.65	1.25	3.65	10.80

	½ oz.	1 oz.	4 ozs.	1 lb.
Ponderosa. General — late — large —oblate. Purplish pink, solid, rather rough, mild flavor, and few seeds ..	\$0.75	\$1.40	\$4.15	\$12.40
Pritchard. East — midseason — me- dium — globe. Some wilt resistance and nail head rust resistance	.55	1.05	3.10	9.20
Red Top. General — midseason — medium small — pear shape. A firm and dry type for paste and puree ..	.75	1.40	4.00	—
Rutgers. East and Midwest — mid- season — medium — globe	.50	.95	2.85	8.60
Sheyenne. North — very early — medium large — deep globe. Very compact plants with fair foliage cover and firm meaty fruits	.80	1.55	4.50	13.40
Stokecross No. 5. East — midseason — medium — globe. Vigorous F ₂ strain	.80	1.55	4.50	13.40
Stokesdale. East — midearly — me- dium — globe. Market and canning	.50	.95	2.85	8.60
Stone. General — late — medium — oblate. Firm and meaty with heavy foliage	.55	1.05	3.10	9.20
Sunray. General — midseason — me- dium — globe to deep oblate. Mild, fine, golden yellow, resistant to fu- sarium wilt	.60	1.10	3.30	9.90
Super Sioux. Midwest — midearly — medium — globe to deep oblate. Does well in hot, dry areas	.55	1.05	3.10	9.20
Urbana. East — midearly — medium — globe to deep oblate. Very com- pact plants, short branches, wilt re- sistant, for market and canning ...	.60	1.10	3.30	9.90
Valiant. East — early — medium — globe. For home and market	.50	.95	2.85	8.60
Wisconsin Chief. North — early — medium large — oblate. Keeps size through season, some resistance to cracking	.80	1.55	4.50	13.40

SMALL FRUITED VARIETIES

	¼ oz.	½ oz.	1 oz.	4 ozs.
Red Cherry } For pickles, salads				
Yellow Plum } and preserves				
Yellow Pear }				
Yellow Husk or Ground Cherry	\$0.45	\$0.75	\$1.40	\$ 4.15
for preserves				
Tiny Tim. See page 81.				

Peace River



Clement Dauplaise of Slack Bros., Ltd., Waterloo, Quebec, cutting out Peace River.

Strong stemmed award winning beauty

This new Gilbert Blackledge origination is one of the finest Carnations we have ever seen. Winner of the Award of Merit at the New England Carnation Growers new varieties show Dec. 1960 with the highest points ever awarded (96.38 out of possible 100).

Peace River's beautifully serrated form will make it a leading white Carnation with outstanding production (all breaks from pinch or cut develop into flowering stems) giving production equivalent to or in excess of other commercial varieties.

Stem Strength: The combination of stem strength, almost complete absence of splitting, desirable size, pure white flowers and outstanding shipping qualities with no tendency for brittleness throughout all the seasons makes this a commercial winner for you.

Keeping Qualities: We have found Peace River will last longer than most other varieties grown today, including Salmonaise and Crown Sim. Peace River ships well due to no tendency to brittleness in any season, robust growth with outstanding commercial production.

PRICES

100 to 200 rooted cuttings, **\$22.00** per 100; 250 to 950 rooted cuttings, **\$180.00** per 1000;
1000 and up rooted cuttings, **\$150.00** per 1000.

F.O.B. Connecticut. Restricted under Grower Agreement

Carnation Cuttings—General List

We offer rooted cuttings from the country's leading Carnation specialists, with every confidence that you'll find them as fine or finer than any other cuttings on the market. **Available throughout the year. Minimum order 100 of a variety.**

WHITE

	Per 100	Per 1000
Alaska (Res.). Sport from White Sim. Strong stems, vigorous growth, nonsplitting	See Yoder	Prices
BGA Atlas (Res.). Produces high quality, medium size blooms with practically no splitting. Early, strong stemmed	See Yoder	Prices
Aurora . Exceptionally large white	See Yoder	Prices
Colorado White Sim . Nonsplitting	\$11.00	\$ 90.00
Crystal Virginia Hercules (Res.). White	See Yoder	Prices
Gay White (Res.). Petals are ruffled and erect. Tops for tinting	See Yoder	Prices
Hoosier Spice . Pure white, good producer ..	15.00	100.00
Imp. White Sim . A selection of White Sim ..	11.00	90.00
Iwata's White Sim (Res.). Min. order 250. Not restricted after Jan. 1, 1963	—	150.00
	12.50	100.00
Mazzanti's White (Res.). Vigorous selection of Imp. White Sim	See Yoder	Prices
Northland . Large, fragrant white	15.00	100.00
Peace River (Res.). Excellent white — serrated form	22.00	150.00
Select White Sim	11.00	90.00
BGA Silvanus (Res.). Very large white	See Yoder	Prices
U. Conn. Sim No. 1 (Res.). Pure white with an occasional red pencil streak	11.00	90.00
White Apollo . White sport of Apollo	15.00	100.00
White Dusty (Res.). White sport of Dusty Rose	See Yoder	Prices
White Littlefield . Pure white sport	15.00	100.00
White Scania (Res.). White sport of Scania ..	15.00	100.00
White Sim . Pure white sport	11.00	90.00
BGA Wogan (Res.). Fine large white. Strong winter stems, top production. Nicely serrated, with little splitting	See Yoder	Prices

LIGHT PINK

Akawee . Delicate light pink	See Yoder	Prices
Aphrodite . A true light pink	See Yoder	Prices
Chalfont Sim (Res.). Pink sport of Mamie ..	See Yoder	Prices
Colo. Light Pink Sim . Select Crowley's Pink ..	See Yoder	Prices
BGA Coquette (Res.). Large Virginia Pink ..	See Yoder	Prices
Crowley's Pink Sim . Light pink	11.00	90.00
Debbie . The same color as Linda	See Yoder	Prices
Ellen Marie (Res.). Light pink	See Yoder	Prices
Kira Flush Pink (Res.). Light pink. Minimum order 250	—	150.00
Linda . Very uniform pink	15.00	100.00
Nancy Thomson . Sport of Sidney Littlefield ..	15.00	100.00
Peterson's New Pink Sim	11.00	90.00
Pink Sim . Light pink	See Yoder	Prices
Select Light Pink Littlefield	11.00	90.00
Shibuya Light Pink	12.50	100.00
BGA Tama (Res.). True light pink. Fine winter stem. Keeps and ships well	See Yoder	Prices
Virginia Hercules . Large sport of Virginia ..	15.00	100.00

MEDIUM and DARK PINK

	Per 100	Per 1000
Boston . Dark pink. Very productive	\$11.00	\$ 90.00
Citation . Rose-pink	15.00	100.00
Imp. Sidney Littlefield . Virus-free	15.00	100.00
Mentor . Rich rose-pink	See Yoder	Prices
Susan . Deep, vivid pink	See Yoder	Prices

SALMON-PINK

Apollo . Widely accepted salmon-pink	11.00	90.00
Apollo No. 2 . An improved Apollo	See Yoder	Prices
Athena . Lustrous salmon-pink	11.00	90.00
BGA Debutante (Res.). Light salmon-pink ..	See Yoder	Prices
Dusty . Salmon-rose, white fringe	11.00	90.00
Flamingo Sim . Intense salmon-red	11.00	90.00
Keefers Cheri Sim . Bright deep salmon-pink ..	15.00	100.00
Laddie Sim . Deep salmon Sim	11.00	90.00
BGA Paris (Res.). Picardy salmon-pink	See Yoder	Prices
Portrait . Deep salmon	11.00	90.00
Shibuya Sim . Deep salmon-pink sport of Mamie	12.50	100.00
Shocking Pink Sim . Brilliant dark salmon ..	11.00	90.00
Venus . Salmon pink	See Yoder	Prices

YELLOW

Braun's Yellow Sim . Lemon-yellow, vigorous ..	11.00	90.00
Harvest Moon . Buff-yellow	11.00	90.00
BGA Helios (Res.). Clear yellow. Does not split	See Yoder	Prices
Imp. Miller's Yellow . Good yellow	15.00	100.00
Pajee . Deep yellow, flecked light pink	15.00	100.00
Tawny (New-Res.). Golden buff sport of Tangerine. Release date Jan. 1, 1963	22.00	150.00
Yellow Sim . Golden yellow	11.00	90.00

CRIMSON and RED

Cardinal Sim . Similar to King Cardinal	11.00	90.00
Carry Sim . (New-Res.). Red sport of Wm. Sim. Originated in Holland	15.00	100.00
Chippewa . Crimson	15.00	100.00
Colorado Red Sim . An improved William Sim ..	See Yoder	Prices
Dark Red Sim . Dark scarlet sport of Sim ..	15.00	100.00
Diplomat (Res.). Bright maroon	22.00	150.00
Elliott's Red Sim . Takes heat well	See Yoder	Prices
Ember Sim . Outstanding color and size	See Yoder	Prices
Giant Red Gayety . Sport of Giant Gayety. ..	15.00	100.00
Hill's Imp. Red Sim . Sport of William Sim ..	See Yoder	Prices
Jumbo Cardinal . Improved Cardinal	15.00	100.00
BGA Mars (Res.). Intense scarlet-red	See Yoder	Prices
Peterson's Red Sim . Scarlet-red	11.00	90.00
Red Gayety . Clear red	11.00	90.00
Scania . A selection from Europe	11.00	90.00
Solred (Res.). Selection of Scania; stronger stems, deeper color	See Yoder	Prices
Tom Knipe (Pat.). Large red, full flower ...	15.00	100.00
Topper . Rich velvety maroon	15.00	100.00
BGA Valhalla (Res.). Medium size crimson ..	See Yoder	Prices

NOVELTIES

	Per 100	Per 1000
Anniversary. Darker than Scarlet Sim	\$11.00	\$ 90.00
Cassandra. Lively yellow. Pink penciling ...	See Yoder	Prices
Cooper's Var. Sim. White; red markings ...	11.00	90.00
Dannebrog. Sport of S. Arthur Sim	15.00	100.00
Deep Purple. Dark sport of Orchid Beauty ..	See Yoder	Prices
Garnet Sim. Scarlet, white penciling	See Yoder	Prices
Gayety. White with red streaks	11.00	90.00
Giant Gayety. Large sport of Gayety	15.00	100.00
Hollywood. Flushed pink	12.50	100.00
Lorraine (Res.). Pink with white bands ...	See Yoder	Prices
Mamie. White with red streaks	11.00	90.00
Mandarin Sim (Pat.). Deep Tangerine sport	25.00	180.00
Melanie (Res.). Sport of Harvest Moon; soft apricot	22.00	150.00

	Per 100	Per 1000
Orchid Beauty. Lavender, frosted maroon ...	See Yoder	Prices
Peking Pink Littlefield. Dark pink to scarlet; white tip	\$15.00	\$100.00
Pikes Peak Sim. Flushed pink with frosting	See Yoder	Prices
BGA Pluto (Res.). Orange variegated	See Yoder	Prices
BGA Safari (Res.). Flushed white on light purple ground	See Yoder	Prices
S. Arthur Sim. White with red stripes	11.00	90.00
Scarlet Sim. Similar to Scarlet King	11.00	90.00
Sunset Sim (Res.). Deep orange	11.00	90.00
Symphony (Pat.). Mauve, reddish purple stripes	15.00	100.00
Tangerine Sim (Pat.). Brilliant orange	See Yoder	Prices
Tetra-Sarah Jane (Pat.). Magenta, silver edge	15.00	100.00

YODER CARNATION CUTTINGS Price List — Effective Jan. 7, 1963

(See General List, page 84, for descriptions)

WHITE

	Base Price per 1000 if ordered 26 weeks in advance —otherwise see table below	Royalty per cutting
Alaska (Res.)	\$76.00	2.8c
BGA Atlas (Res.)	76.00	2.8c
Aurora	80.00	—
Colo. Wh. Sim	76.00	—
Cr. Virginia Hercules ..	96.00	—
Gay White (Res.)	76.00	2.8c
Imp. Wh. Sim	76.00	—
*Mazzanti's White (Res.) ..	80.00	2.8c
*Peace River (Res.)	80.00	5.6c
BGA Silvanus (Res.)	76.00	2.8c
White Apollo	80.00	—
*White Dusty (Res.)	80.00	2.8c
Wh. Littlefield	76.00	—
Wh. Sim	76.00	—
BGA Wogan (Res.)	76.00	2.8c

SALMON PINK

	Base Price per 1000 if ordered 26 weeks in advance —otherwise see table below	Royalty per cutting
Apollo	\$76.00	—
No. 2 Apollo	80.00	—
Athena	80.00	—
Dusty	76.00	—
Flamingo Sim	76.00	—
Laddie Sim	76.00	—
BGA Paris (Res.)	76.00	2.8c
Portrait	76.00	—
Shibuya Sim	76.00	—
Venus	80.00	—

DARK PINK

Imp. Sid. Littlefield ..	76.00	—
Mentor	80.00	—
*Susan (Res.)	80.00	2.8c

MISCELLANEOUS

	Base Price per 1000 if ordered 26 weeks in advance —otherwise see table below	Royalty per cutting
Anniversary	\$76.00	—
Braun's Yellow Sim ...	76.00	—
Cassandra	80.00	—
Deep Purple	96.00	—
Garnet Sim	80.00	—
Gayety	76.00	—
Harvest Moon	76.00	—
BGA Helios (Res.)	76.00	2.8c
Lorraine	88.00	—
Mamie	76.00	—
Orchid Beauty	88.00	—
Pajee	88.00	—
Pikes Peak Sim	76.00	—
*BGA Pluto (Res.)	80.00	2.8c
*BGA Safari (Res.)	80.00	2.8c
S. Arthur Sim	76.00	—
*Tangerine Sim (Res.) .	80.00	2.8c

LIGHT PINK

Akawee	88.00	—
Aphrodite	80.00	—
*Chalfont Sim (Res.) ..	80.00	2.8c
Colo. Lt. Pink Sim	76.00	—
*BGA Coquette (Res.) ..	80.00	2.8c
Debbie	76.00	—
*BGA Debutante (Res.) ..	80.00	2.8c
Ellen Marie	88.00	—
Lt. Pk. Littlefield	76.00	—
Linda	88.00	—
Pet. New Pk. Sim	76.00	—
Pink Sim	76.00	—
BGA Tama (Res.)	76.00	2.8c
Virginia Hercules	80.00	—

RED

Cardinal Sim	76.00	—
Colo. Red Sim	76.00	—
Dk. Red Sim	76.00	—
Elliott's Red Sim	88.00	—
Ember Sim	88.00	—
Hill's Imp. Red Sim ...	76.00	—
BGA Mars (Res.)	76.00	2.8c
Pet. Red Sim	76.00	—
Red Gayety	76.00	—
Scania	76.00	—
Solred (Res.)	76.00	2.8c

CRIMSON

Topper	80.00	—
*BGA Valhalla (Res.) ..	80.00	2.8c

MINIATURES—Spray Types

*BGA Chiquita (Res.). Reddish-orange	80.00	2.8c
*BGA Jewel (Res.). White with purple bands	80.00	2.8c
*BGA Pinkie (Res.). Deep pink	80.00	2.8c
*BGA Twinkle (Res.). White with red penciling	80.00	2.8c
Baby Doll (Res.). Pure white with deep serration	76.00	2.8c
Elegance	96.00	—
Exquisite	88.00	—

*Not available until Feb. 4, 1963

YODER CARNATION CUTTING PRICE TABLE (Effective January 7, 1963)

1. THE PRICE LISTED FOR EACH VARIETY is the rate per 1000 cuttings of that variety booked 26 weeks or more in advance of requested shipping date. This price is subject to adjustments as indicated below.
2. ROYALTIES ARE LISTED SEPARATELY and are not included in price. Royalties are not subject to any adjustments, and the full amount of royalty is due on each cutting.
3. THE PRICE FOR LESS THAN 1000 CUTTINGS of a variety, is:
Listed price plus \$.40 per 100 cuttings for (500-950) cuttings
Listed price plus \$.80 per 100 cuttings for (300-450) cuttings
Listed price plus \$1.20 per 100 cuttings for (100-250) cuttings
Listed price plus \$1.00 per 50 cuttings for (50) cuttings
4. ON ORDERS RECEIVED LESS THAN 26 WEEKS IN ADVANCE OF REQUESTED SHIPPING DATE, varieties will be priced at —
Price plus 10% — 18 weeks before shipping

Price plus 15% — 12 weeks before shipping
Price plus 20% — 6 weeks before shipping
Price plus 30% — Less than 6 weeks

5. THE DATE OF A CHANGE ON AN ORDER PREVIOUSLY BOOKED will automatically determine the price of each variety affected by such a change. (Items on order not changed will have their price based on the receiving date of the original order.)
6. QUANTITY DISCOUNTS for the total number of cuttings purchased within a 52-week period.
7,500 to 9,950 cuttings 2% 22,500 to 32,450 cuttings 6%
10,000 to 14,950 cuttings 3% 32,500 to 44,950 cuttings 7%
15,000 to 22,450 cuttings 5% 45,000 cuttings 10%
(Royalties are not subject to discounts)
7. UNROOTED CUTTINGS (minimum 1000 each variety) net amount less \$15.00 per 1000 cuttings.
8. IF INVOICE IS NOT PAID WITHIN 28 DAYS after date of invoice, 10% will be added to the total amount due.

BGA—Breeder Grower Agreement—BGA

Miniature Carnations



CLARET ELEGANCE



CHINESE RED ELEGANCE

NEW MINIATURE VARIETIES

(Originated and Propagated by W. Pomeroy Thomson, Hartford, Conn.)

NEW FOR 1963

RELEASE DATE JANUARY 1, 1963

Claret Elegance (Res.). Sport from Elegance. Color like Claret wine with edges blending to white. This has proven to be a very popular color with retailers. Growing and production habits similar to parents. Price schedule **A**.

Chinese Red Elegance (Res.). Sport from Scarlet Elegance. Deeper color than parent with slightly diffused edges. Gives overall appearance of being Chinese Red in color. Growing and production habits same as parent. Price schedule **A**.

OTHER MINIATURES

Bo-Peep (Res.). White with purple stripes (like Harlequin) makes long graceful sprays with many flowers, four to eight terminal flowers per stem. Grows tall with heavy production. Flower size 1½ to 2 inches. A real good novelty. Price schedule **A**.

Cindy (Res.). Salmon red, slightly frosted. Excellent spray formation with four to seven terminal flowers per stem. Growth similar to Elegance in height and production. A good color addition to the miniature family. Price schedule **A**.

Peter Pan (Res.). Rich maroon; good spray formation. Grows similar to Elegance in height and production. Flower size 2 inches. Perhaps the best keeper of all miniature Carnations. Beautiful in arrangements; makes the perfect boutonniere. Price schedule **A**.

Royalette (Res.). A first prize winner at A. C. S. Convention of 1960 in Boston. Purple with fuchsia edges. A strong productive growing seedling. Popular with retail florists. Price schedule **A**.

Scarlet Elegance (Res.). A sport of Elegance, similar in color except that it is salmon red where Elegance is pink. Same growth habits as its parent. This color fits in well where a soft red is desirable rather than pink. Price schedule **A**.

Tinker Bell (Res.). Light shell pink. Perhaps the most popular color of all of the miniatures. Spray formation is not quite as good as some, but production is high and retailers love it. Keeping quality is excellent. Height is medium. Flower size 2½ inches. Price schedule **A**.

Uconn Dorothy Ober (Res.). Yellow with pink flecks. A seedling developed by Dr. Gus Mehlquist at University of Conn. This variety may be grown as a medium-sized standard, but we find it adapts well as a spray type with many strong laterals. A tall vigorous grower. Price schedule **A**.

Wendy (Res.). White with delicate pink stripes. Growth, production and spray formation very similar to Elegance. A very popular color. Flower size 2 inches. Price schedule **A**.

White Elegance (Res.). White sport of Elegance. A strikingly beautiful flower with all the qualities of Elegance. (Flowers slightly smaller). We feel certain this variety will be at least as popular as Elegance, perhaps more so, as it can be colored and tinted as desired. Price schedule **A**.

White Feathers (Pat.). Feathery white flowers; long graceful stems with four to eight well-placed flowers per stem. Growth is tall with very heavy production. Very fragrant. Destined to become one of the most popular of all miniatures. Flower size 2 inches to 2¼ inches. Price schedule **A**.

Elegance. Flushed deep pink. Most widely grown of all the miniatures. Its popularity is growing steadily. Price schedule **B**.

Exquisite Select. Flushed purple with orchid edges. This is a new single clone selection. Very true to color, and as yet no wild growth has been observed. Price schedule **B**.

Quantities Per Variety	Schedule A	Schedule B
50 only	\$12.50	\$ 9.00
100 - 225 per 100	22.00	15.00
250 - 975 per 100	18.00	12.50
1,000 or more per 100	15.00	10.00

Varieties cannot be grouped for quantity prices.

See page 85 for other miniatures.



Ted Switzkofski, Bayport, L.I., is now going into his fourth year of growing Miniature Carnations. Four years ago he decided to eliminate standards and grow nothing but Miniatures. His success is a showcase for the versatility and remarkable sales story of the Miniature Carnation. Why don't you try them, too?

CULTURE OF MINIATURE CARNATIONS by W. Pomeroy Thomson

In general, Miniature Carnations require the same growing conditions as other Carnations. We have found they do well at night temperatures of 48 to 54°. More production can be expected from the warmer temperatures, and quality will remain good.

As for spacing, we suggest 4 in. x 6 in. or 3 in. x 8 in., as we feel best total production per square foot will result from this close planting. However, many growers have had very good luck with wider spacings.

We like to grow "Elegance" and "Exquisite" with no pinch — that is, we let the first cut spray be the pinch. These varieties will break freely by themselves and the cut will spread out satisfactorily. This does not hold so well with some of the newer varieties which need to be handled more like standard varieties; in other words, given at least one pinch.

Do not disbud the Miniatures in the regular way. Instead of removing the side buds, take out only the center bud, allowing the side buds to develop into a spray. The best time to cut the spray is when two flowers are open, the rest will be showing color, and will continue to open in water. We strongly suggest that a sign be prominently displayed by the planting of Miniatures which says "DO NOT DISBUD." In so many cases, a well intended person has come along and disbudded some Miniatures.

As for bunching, we believe a certain number of flowers and buds showing color should determine the size of bunches rather than any given number of stems. We use a count of 36 flowers and buds showing color, and feel it makes a good unit. The sprays will vary in the number of flowers each, depending on culture, heaviness of crop and time of year. A given number of flowers per bunch will create uniformity, whereas a given number of stems probably will not.



A group of Ball salesmen inspecting Garden Roses at Amling DeVor & Passage Nurseries, where Paul Passage pointed out that the use of improved understocks for all of these budded Roses results in an even superior type of growth than was possible in the past. This should mean a real advantage for midwestern and eastern growers. Standing, from the left: Paul Passage, Harold Innis, Bob Chase, Norm Lamberg, Kenn Tufts, Paul DeVor, Frank Drab, Hi Emerson, Darrell Messick, Cliff Erickson, Bill Fischer, Blaine Stuhlsatz, Ben Luther. Kneeling, from the left: Clint Miller, Bill Mac Donald, Carl Weals, Vince Nierste, and Phil Jones.

Ball Garden Roses Bare-root. Available January through spring.

PATENT HYBRID TEAS

Retail Variety and Description No. 1 Wholesale Price Each

Minimum Retail Price		(Price you pay)		
		10 Each	20-90 Each	100-250 Each
\$3.00	Americana (New — Pat. 2058). Brilliant red	\$1.65	\$1.50	\$1.40
3.00	Arlene Francis (Pat. 1684). Golden yellow	1.65	1.50	1.40
2.75	Aztec (Pat. 1648). Vivid scarlet-orange	1.50	1.37½	1.30
3.00	Chicago Peace (New — Pat. 2037). Rich pink blend	1.65	1.50	1.40
3.50	Christian Dior (Pat. 1943). Crimson red overlaid with iridescent scarlet. Long-stemmed	1.85	1.75	1.55
2.50	Chrysler Imperial (Pat. 1167). Crimson	1.40	1.25	1.20
2.50	Confidence (Pat. 1192). Light pink to yellow	1.40	1.25	1.20
2.25	Diamond Jubilee (Pat. 824). Buff-yellow	1.25	1.12½	1.05
3.00	Duet (Pat. 1903). Bicolor with bright crimson reverse	1.65	1.50	1.40
3.00	Fascinating (New — Pat. 1945). Crimson and Empire yellow	1.65	1.50	1.40

Minimum Retail Price		(Price you pay)		
		10 Each	20-90 Each	100-250 Each
\$3.00	Gail Borden (Pat. 1618). Pastel pink and apricot tints	\$1.65	\$1.50	\$1.40
3.00	Garden Party (Pat. 1814). Pale ivory brushed with pink	1.65	1.50	1.40
3.00	Golden Masterpiece (Pat. 1284). Golden yellow	1.65	1.50	1.40
2.00	Golden Scepter (Pat. 910). Yellow	1.10	1.00	.95
2.00	Happiness (Pat. 911). Dark red ...	1.10	1.00	.95
3.00	Hawaii (New — Pat. 1833). Orange-coral	1.65	1.50	1.40
2.75	Helen Traubel (Pat. 1028). Pink-apricot	1.50	1.37½	1.30
3.50	King's Ransom (Pat. 2103). Rich chrome yellow, glossy dark green foliage	1.85	1.75	1.55
3.00	Kordes Perfecta (Pat. 1604). Bicolor. Cream-white, pink to carmine edges	1.65	1.50	1.40

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

PATENT HYBRID TEAS (Cont'd)

Retail	Variety and Description	No. 1 Wholesale Price Each	(Price you pay)		
			10 Each	20-90 Each	100-250 Each
\$2.50	Lady Elgin (Pat. 1469). Orange Apricot		\$1.40	\$1.25	\$1.20
2.50	Love Song (Pat. 1360). Blend of yellow and deep coppery pink		1.40	1.25	1.20
2.75	Mojave (Pat. 1176). Orange		1.50	1.37½	1.30
2.50	New Yorker (Pat. 823). Rich red ..		1.40	1.25	1.20
2.25	Nocturne (Pat. 713). Dark red ...		1.25	1.12½	1.05
3.00	Pink Duchess (New — Pat. 1834). Rich pink; fragrant		1.65	1.50	1.40

ROYAL HIGHNESS
All-America Rose Selection
1963



Retail	Variety and Description	No. 1 Wholesale Price Each	(Price you pay)		
			10 Each	20-90 Each	100-250 Each
\$3.00	Pink Peace (Pat. 1759). Pink		\$1.65	\$1.50	\$1.40
3.50	Royal Highness (New — AARS — Pat. 2032). Magnificent clear light pink. Long, beautifully shaped buds and rich, glossy foliage. Fragrant. Pictured below		1.85	1.75	1.55
3.00	San Francisco (New — Pat. 2045). Deep oriental red		1.65	1.50	1.40
3.00	Simone (Pat. 1847). Orchid		1.65	1.50	1.40
3.00	Sterling Silver (Pat. 1433). Silver-lavender. Fragrant		1.65	1.50	1.40
3.00	Suspense (Pat. 1944). Bicolor red with pale yellow reverse		1.65	1.50	1.40
2.50	Sutter's Gold (Pat. 885). Yellow, shaded red		1.40	1.25	1.20
3.50	Tanya (New — Pat. 1712). True orange		1.85	1.75	1.55
2.75	Tiffany (Pat. 1304). Pink, yellow base		1.50	1.37½	1.30
3.50	Tropicana (New — AARS — Pat. 1969). 4½-5 in. flowers of fluorescent orange-red with rich green foliage. Non-fading. Pictured below		1.85	1.75	1.55
2.75	White Knight (Pat. 1359). White ...		1.50	1.37½	1.30
2.50	White Queen (Pat. 1762). Sparkling new white		1.40	1.25	1.20
2.50	White Swan (Pat. 1115). White		1.40	1.25	1.20

TROPICANA
All-America Rose Selection
1963



PATENT GRANDIFLORAS

Retail Minimum Retail Price	Variety and Description	No. 1 Wholesale Price Each		
		10 each	(Price you pay) 20-90 each	100-250 each
\$2.75	Ben-Hur (New — Pat. 2066). Spectacular dark "Arena" red.	\$1.50	\$1.37½	\$1.30
2.50	Buccaneer (Pat. 1119). Sun-shine yellow	1.40	1.25	1.20
2.00	Carrousel (Pat. 1066). Deep rich red	1.10	1.00	.95
2.75	El Capitan (Pat. 1796). Radiant cherry-red	1.50	1.37½	1.30
3.50	John S. Armstrong (Pat. 2056). Glowing dark red	1.85	1.75	1.55
2.75	Montezuma (Pat. 1383). Scarlet-orange	1.50	1.37½	1.30
3.00	Pink Parfait (Pat. 1904). Soft pastel pink shades	1.65	1.50	1.40
2.50	Queen Elizabeth (Pat. 1259). Delicate clear pink	1.40	1.25	1.20
2.50	Roundelay (Pat. 1280). Vivid glowing red	1.40	1.25	1.20
2.50	Starfire (Pat. 1742). Red	1.40	1.25	1.20

PATENT FLORIBUNDAS

1.75	Baby Blaze (Pat. 1362). Velvety cherry-red	1.00	.87½	.80
2.50	Circus (Pat. 1382). Bicolor red and yellow	1.40	1.25	1.20
2.00	Fashion (Pat. 789). Coral-pink	1.10	1.00	.95
2.00	Fire King (Pat. 1758). Fiery red	1.10	1.00	.95
1.75	Fusilier (Pat. 1709). Orange-red	1.00	.87½	.80
2.00	Gold Cup (Pat. 1683). Yellow	1.10	1.00	.95
2.50	Golden Garnette (New — Pat. 1898). Deep golden yellow ...	1.40	1.25	1.20
2.50	Golden Slippers (PAF). Fluorescent orange and gold	1.40	1.25	1.20
1.75	Goldilocks (Pat. 672). Yellow	1.00	.87½	.80
2.00	Jiminy Cricket (Pat. 1346). Coral-orange	1.10	1.00	.95
1.75	Ma Perkins (Pat. 1143). Coral-shell-pink	1.00	.87½	.80
1.75	Red Pinocchio (Pat. 812). Carmine	1.00	.87½	.80
2.00	Sarabande (Pat. 1716). Large, brilliant orange-red	1.10	1.00	.95
2.00	Spartan (Pat. 1357). Reddish coral	1.10	1.00	.95
2.00	Vogue (Pat. 926). Cherry-coral	1.10	1.00	.95
2.00	White Bouquet (Pat. 1415). White	1.10	1.00	.95
1.50	Yellow Pinocchio (Pat. 992). Yellow	.90	.75	.70

PATENT CLIMBERS

2.50	Cl. Aloha (Pat. 948). Coral pink	1.40	1.25	1.20
2.50	Cl. Chrysler Imperial (Pat. 1528). Flaming red	1.40	1.25	1.20
2.75	Cl. Crimson Glory (Pat. 736). Deep red	1.50	1.37½	1.30
3.00	Cl. Don Juan (Pat. 1864). Velvety red	1.65	1.50	1.40
2.50	Cl. Golden Showers (Pat. 1557). Yellow	1.40	1.25	1.20
2.50	Cl. Peace (Pat. 932). Yellow, edged pink	1.40	1.25	1.20

No. 1½ Grade 20% less than No. 1. Write us for special prices on more than 250 of any patented varieties. MINIMUM ORDER 10 PLANTS OF A VARIETY, ORDER IN MULTIPLES of 10. Prices are "Per variety" on all patent varieties regardless of total number of bushes you order.

F.O.B. West Chicago. Plus boxing and packing at cost.

BALL GARDEN ROSES

STANDARD HYBRID TEAS

RED	
Ami Quinard	Etoile de Hollande
Better Times	McGredy's Scarlet
Charlotte Armstrong	Mirandy
Christopher Stone	Poinsettia
Crimson Glory	Red Radiance
YELLOW	
Eclipse	Mrs. P. S. DuPont
Lowell Thomas	Peace
McGredy's Yellow	Soeur Therese
PINK	
Editor McFarland	Picture
K. T. Marshall	Pink Radiance
Margaret McGredy	The Doctor
WHITE	
Frau Karl Druschki	K. A. Victoria
BICOLOR	
Autumn	Pres. Hoover
Condesa de Sastago	Talisman
Countess Vandal	

STANDARD FLORIBUNDAS

RED	PINK
Eutin	Betty Prior
Floradora	Cecile Brunner
Imp. Lafayette	Else Poulsen
WHITE	Pink Bountiful
Summer Snow	Pinocchio
	Rosenelfe

STANDARD CLIMBERS

WHITE	YELLOW
Cl. Snowbird	Cl. Gold Rush
BICOLOR	PINK
Cl. Pres. Hoover	Cl. New Dawn
Cl. Talisman	Cl. Pink Radiance
RED	
Cl. Blaze	Cl. Improved Blaze
Cl. Etoile de Hollande	Cl. Paul's Scarlet

PRICES STANDARD VARIETIES

	Per 10	Per 100	Per 1000
No. 1 Grade	\$6.50	\$60.00	\$550.00
No. 1½ Grade	5.25	47.50	425.00

All Rose Bushes sold in units of 10 plants of a variety and grade or multiples of 10. Standard varieties may be grouped for quantity rate. 1000 rate applies only on orders for 1000 or more standard varieties. Plus boxing and packing at cost.

IMPORTANT!

Prices quoted above are F.O.B. West Chicago, Baltimore or New Jersey if your order totals 100 or 250 plants or multiples thereof (our standard packing case sizes) and if your order is received by us before November 10.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.
OFFERED SUBJECT TO CROP

Ball Forcing Pot Roses GROWN BY AMLING-DEVOR

Our Roses for pot forcing are budded to our order by a West Coast specialist. As a result of years of experience, we are confident that no finer plants are available at any price. We earnestly suggest placing your order with us EARLY so we can furnish you the varieties and grades you need. Our pot forcing Roses are budded for us 2 years in advance. When our crop of a variety is booked up, we are sold out for the season. All orders accepted in the order of their receipt. Shipment December through February. We recommend XXX grade plants for large specimen plants and XX grade for medium sized plants.

PATENT VARIETIES

Scarlet Marvel (Pat. 1771). Bright scarlet-orange Floribunda type.

Prices on patented varieties are **per variety**. Patented varieties **cannot** be grouped with standards for quantity prices. Plus packing at cost.

Thunderbird (Pat. 1677). Velvety scarlet sport of Garnette.

Skylark (Pat. 1678). Clear pink sport of Carol Amling.

Carol Amling (Pat. 1126). A light coral-pink sport of Garnette.

Prices on each of patented varieties:

XXX GRADE. 10 plants, **\$1.00** each; 20-90 plants, **87½c** each; 100-240 plants, **80c** each; 250 or more plants, **75c** each. **Minimum order 10 of a variety**. Sold in units of 10.

XX GRADE. 10 plants, **80c** each; 20-90 plants, **70c** each; 100-240 plants, **64c** each; 250 or more plants, **60c** each. **Minimum order 10 of a variety**. Sold in units of 10.

STANDARD VARIETIES

Bright Pink Garnette. A bright, deep pink sport of Garnette.

Dick Koster. Bright salmon-rose.

Garnette. This Floribunda cut-flower variety is excellent for pot forcing. Bronzy-green foliage, rich red flowers.

Margo Koster. Salmon-orange with globular shaped flowers.

Mothers Day. Red sport of Margo Koster. For Easter and later.

Rose Garnette (New). Rich rose red sport of Garnette. Habit same as Garnette; adds a new color to the Garnette field.

Summer Snow. Pure white.

Triomphe d'Orleans. Carmine or cherry-red.

Prices on standard varieties at left:

XXX GRADE. 10-90 plants, **70c** each; 100-990, **65c** each; 1000 or more, **60c** each. **Minimum order 10 of a variety**. Sold in units of 10. Packed 100 or 200 per case.

XX GRADE. 10-90 plants, **60c** each; 100-150 plants, **55c** each; 160-990 at case price; 1000 or more, **45c** each. **Minimum order 10 of a variety**. Sold in units of 10. Per case 160 XX, **\$72.50**.

All **standard varieties** may be grouped to take advantage of lowest quantity price. **Packing on Pot Forcing Roses charged at cost**.

Miniature Roses

F.O.B. PENNSYLVANIA 3-inch plants shipped in plastic Poly-Pots, individually labeled. Available fall-spring.

Minimum Retail Price		Wholesale Price			Minimum Retail Price		Wholesale Price		
		10-24 Each	25-99 Each	100-249 Each			10-24 Each	25-99 Each	100-249 Each
\$1.50	Baby Gold Star . Golden yellow	\$0.75	\$0.70	\$0.65	\$1.50	Pixie Rose (Pat. 2095). Deep pink ..	\$0.75	\$0.70	\$0.65
1.50	Bo-Peep (Pat. 976). Soft pink	.75	.70	.65	1.50	Red Imp (Pat. 1032). Rich red	.75	.70	.65
1.50	Cinderella (Pat. 1051). White	.75	.70	.65	1.25	Robin (Pat. 1663). Deep red	.62	.60	.55
1.25	Midget . Rose-red	.62	.60	.55	1.50	Scarlet Gem (Pat. 2155). Scarlet ...	.75	.70	.65
1.25	Pixie . Dainty white	.62	.60	.55	1.25	Sweet Fairy (Pat. 748). Pink	.62	.60	.55
1.25	Pixie Gold (Pat. 2091). Fine yellow	.62	.60	.55	1.25	Tinker Bell (Pat. 1293). Pink	.62	.60	.55

Minimum order 50, in units of 10 of a variety. No packing charge. Prices are per variety. Varieties **cannot** be grouped for quantity price. Write for prices on larger quantities.

MINIATURE ROSE COLLECTIONS

THE INTRODUCTORY SPECIAL:

COLLECTION MR6—25 plants **\$19.25** (Value \$20.)

5 **Baby Gold Star** 5 **Pixie Rose**
5 **Bo-Peep** 5 **Red Imp**
5 **Cinderella**

THE FIVE COLOR SPECIAL:

COLLECTION MR5—50 plants **\$30.00** (Value \$31.)

10 **Midget** 10 **Robin**
10 **Pixie** 10 **Sweet Fairy**
10 **Pixie Gold**

THE STAR TRIO:

COLLECTION MR2—50 plants **\$34.50** (Value \$36.)

30 **Red Imp** 10 **Cinderella** 10 **Bo-Peep**

PRICES SUBJECT TO CHANGE WITHOUT NOTICE. OFFERED SUBJECT TO CROP

MINIATURE TREE ROSES

Available Jan. 15-May 15.

Try these interesting and beautiful plants. On 12" trunks with miniature Rose heads. Very hardy and will bloom profusely.

Baby Gold Star. **Pixie Rose.**
Cinderella. **Red Imp.**
Midget. **Scarlet Gem.**

Price: 10-49 plants, **\$2.00** each; 50 plants and up, **\$1.85** each.

MINIATURE TREE ROSE COLLECTION

MR7 20 plants. 10 **Red**, 5 **White**, 5 **Pink**, **\$38.50** (Value \$40.00)

MINIATURE TREE ROSE MIDGET



MINIATURE ROSES (Cont'd) F.O.B. CALIFORNIA From 2 1/4 inch pots. Available September to June

Minimum
Retail
Price

Each

BICOLOR

\$2.00 **Little Flirt** (P.A.F.). Very brilliant Talisman colored. Double flower. Pointed buds **\$1.00**

RED

1.50 **Little Buckaroo** (Pat. 1726). Velvety red **.50**
1.50 **Westmont** (Pat. 1950). Red. 1 1/2 in. double flowers **.50**
1.50 **Lollipop** (Pat. 2080). Brilliant new red **.60**
1.50 **Red Imp** (Pat. 1032). Small vivid red **.60**
1.25 **Centennial Miss** (Pat. 1301). Rose to wine red **.35**
1.25 ***Red Arrow** (P.R.R.). New double red **.35**
1.50 ***Cri-Cri**. New. Orange red **.60**

YELLOW

2.00 ***Yellow Doll** (P.R.R.) Best yellow **1.00**
1.50 **Bit O'Sunshine** (Pat. 1631). Buttercup **.60**
1.50 **Little Scotch** (Pat. 1952). Butterscotch **.50**
1.50 **Yellow Bantam**. Glossy, very tiny foliage. Bushy. **.50**
1.50 **Jackie**. Soft yellow. Fragrant. Very double **.50**
1.50 **Baby Gold Star**. Golden yellow. Double **.50**

PINK

1.50 **Eleanor** (P.A.F.). Slender Hybrid Tea type buds in a new shade of coral-pink. Glossy foliage **.60**
1.50 ***Lady Ann**. New bright pink **.50**
1.50 **Mona Ruth** (Pat. 2081). Real rose form **.60**
1.25 **Pink Heather** (Pat. 2082). Many tiny flowers **.35**
1.25 **Mary Haywood** (Pat. 1766). Dbl. pink. Low **.35**
1.25 **Patty Lou** (Pat. 1335). Double rose pink silver **.50**
1.25 **Pink Joy** (Pat. 1378). Fragrant pink **.35**
1.25 **Rosa Rouletti**. Dbl. pink **.35**
1.50 **Baby Ophelia** (P.R.R.). Soft pink and gold **.60**
1.25 **Pink Fairy** (The Fairy). Hardy, free flowering **.35**

Minimum
Retail
Price

Each

WHITE

\$1.50 **Easter Morning** (P.A.F.). Very double, white **\$0.60**
1.50 **Frosty** (Pat. 1412). Whitest white **.50**
1.50 **Cinderella** (Pat. 1051). Double white **.60**
1.50 **Polka Dot**. Good double white **.50**
1.25 **White Aster** (Pat. 1767). Pink buds, white flowers .. **.50**
1.25 **White Fairy**. Small; very double **.35**

LAVENDER SHADES

1.50 **Silver Tips** (P.A.F.). Br. pink, changing to lavender **.60**
1.25 **Mr. Bluebird**. 12-14 in. high. Lavender blue **.50**

CLIMBING MINIATURES (Grow 3-5 ft. tall)

2.00 **Little Showoff** (P.A.F.). Yellow splashed with red and orange. 4 to 5 ft. tall **.80**
2.00 **Pink Cameo** (Pat. 1451). Rose-pink. Everblooming **.80**
2.00 **Candy Cane** (Pat. 1951). Flower pink, white stripes **.80**
1.50 **Orange Elf**. Orange buds. Everblooming. Hardy .. **.60**
1.50 **Magic Wand**. Light red. Lots of flowers **.60**
1.50 **Climbing Jackie**. Excellent. Ivory-yellow **.60**

Varieties checked (*) are newest introductions.

Minimum order 25 plants, 5 of a variety.

For prepaid transportation add 5c per plant, otherwise F.O.B. California.

MINIATURE TREE ROSES

Nice heads on 10 inch standards (trunk).

COMPLETELY GROWN in 5 inch square plastic pots. Can ship anytime.

Assorted colors, labeled. Price: **\$1.60** each

Minimum order 20 trees. If ordered with Miniature Roses minimum order 10.

PREPAID GARDEN ROSE COLLECTION Available January through April

This collection is ideal for the grower who wants a package deal. **200 Garden Roses No. 1 1/2 and 200 No. 79 Herculite Pots**, together with colored pictures of each variety. You pay only for the Roses and Herculite Pots; **Transportation, packing and colored pictures are free.**

Minimum Retail Price each	Qty.	Variety	Price Each	Total
\$2.50	10	H.T. Chrysler Imp. (Pat.). Crimson ..	\$1.12	\$11.20
3.00	10	H.T. Golden Masterpiece (Pat.). Golden yellow	1.32	13.20
2.25	10	H.T. Nocturne (Pat.). Dark red	1.00	10.00
3.00	10	H.T. Pink Peace (Pat.). Pink	1.32	13.20
2.50	10	H.T. White Swan (Pat.). White	1.12	11.20
2.50	10	Grfl. Buccaneer (Pat.). Sunshine yellow	1.12	11.20
2.75	10	Grfl. El Capitan (Pat.). Radiant cherry red	1.20	12.00
3.00	10	Grfl. Pink Parfait (Pat.). Pastel pink shades	1.32	13.20
2.00	10	Fl. Gold Cup (Pat.). Bright yellow ..	.88	8.80
1.75	10	Fl. Ma Perkins (Pat.). Coral shell pink	.80	8.00

Minimum Retail Price each	Qty.	Variety	Price Each	Total
\$2.00	10	Fl. Sarabande (Pat.). Orange red	\$0.88	\$ 8.80
2.50	5	Cl. Aloha (Pat.). Coral pink	1.12	5.60
2.50	5	Cl. Chrysler Imperial (Pat.). Red	1.12	5.60
2.50	5	Cl. Golden Showers (Pat.). Yellow ...	1.12	5.60
2.50	5	Cl. Peace (Pat.). Yellow edged pink ..	1.12	5.60
	10	H.T. Ami Quinard (St.). Deep red ...	.52 1/2	5.25
	10	H.T. Christopher Stone (St.). Bright red	.52 1/2	5.25
	10	H.T. Condesa de Sastago (St.). Oriental red and yellow	.52 1/2	5.25
	10	H.T. Mirandy (St.). Garnet red	.52 1/2	5.25
	10	H.T. Peace (St.). Yellow flushed pink	.52 1/2	5.25
	10	H.T. President Hoover (St.). Orange, rose and gold	.52 1/2	5.25
	10	Cl. Pauls Scarlet (St.). Scarlet	.52 1/2	5.25

Plus 200 #79 Herculite Pots

Total price for Collection **\$179.95**
16.00
\$195.95

SOLD ONLY AS A COLLECTION. Substitution will be made in equal or better value — subject to crop.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE



New Red-Red Geranium Cardinal

For the first time, a red Geranium with the habit and heat tolerance of Pink Cloud. Brilliant signal red in color, the large, flat florets are borne in clusters 4½ to 6 inches across, averaging 40-50 buds and florets. Developed by the Dept. of Horticulture of Iowa State University, Cardinal will be sold under Grower Agreement, and will be available from three f.o.b. points below.

Available February 15, 1963.

F.O.B. CALIFORNIA (Grower 1)

	Per 100	Per 1000
Unrooted cuttings	\$ 7.50	\$ 70.00
Calloused cuttings	10.00	95.00
Rooted cuttings	12.00	110.00

This variety can be included with your regular California order. If ordered separately **MINIMUM order will be 1000** (No exceptions).

F.O.B. OHIO (Grower 2)

	Per 100	Per 1000
Rooted Cuttings	\$19.00	\$170.00
2¼-Inch Jiffy-Pots	23.00	210.00

MINIMUM ORDER 100.

F.O.B. PENNSYLVANIA (Grower 3)

CULTURED and INDEXED	Per 100	Per 1000
Rooted cuttings	\$23.50	\$220.00
2¼-inch Jiffy-Pots	29.50	280.00

MINIMUM ORDER 100.



GERANIUM CARDINAL

New brilliant red Geranium developed by the Dept. of Horticulture, Iowa State University. Habit and heat tolerance of Pink Cloud.

BALL GERANIUMS

CUTTINGS

Available throughout the year, f.o.b. California. **When ordering, be sure to specify whether you want ROOTED, UNROOTED, or CALLOUSED cuttings.**

Always	Genie	Pink Cloud
Appleblossom	Gregerson's White	Pink Fiat
Avalon Beauty	Imp. Red Fiat	Poitevine
Avalon Red	Imp. Ricard	Radio Red
Better Times	Irene	Red Landry
Better Times Irene	Irvington Beauty	Salmon Ideal
Blaze	Madonna	Salmon Irene
Charlotte	Mme. Buchner	Salmon Supreme
Chiffon	Mme. Landry	Snowball
Dark Red Irene	Mrs. Lawrence	Springfield Violet
Dawn	Olympic Red	Springtime
Enchantress Fiat	Orange Fiat	Victory Red
E. G. Hill	Orange Ricard	Ivy Leaf Asst.
Fiat Supreme	Penny	Fancy Leaf Asst.

	Unrooted Cuttings	Calloused Cuttings	Rooted Cuttings
Per 100	\$ 4.50	\$ 7.00	\$ 8.50
Per 1000	40.00	65.00	80.00

MINIMUM ORDER, 1500 CUTTINGS, 100 of a variety. Less than 250 cuttings of a variety will be billed at the 100 rate; 250 or more cuttings of any variety at the 1000 price. **AIR FREIGHT ONLY.** 3000 cuttings can be shipped at minimum air freight rates. Specify airport to which cuttings are to be sent and your telephone number where air freight companies can call you upon arrival. Orders for Rooted Cuttings are rooted to order only — allow 6 weeks for delivery.

2¼-INCH PLANTS

F.O.B. Colorado, New York, North Carolina, Ohio, Texas, where available. Your order will be shipped from nearest available source.

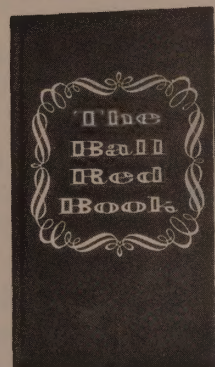
Enchantress Fiat

Dark Red Irene

Prices above 2, each: \$17.00 per 100; \$160.00 per 1000.

Better Times	Irene	Pink Cloud
Dawn	Mme. Buchner	Salmon Irene
Genie	Olympic Red	Spartan White
Imp. Ricard	Penny	Springtime

Prices above 12, each: \$16.00 per 100; \$150.00 per 1000.



BALL RED BOOK

Tenth Edition

Cultural information on over 120 miscellaneous crops, with special emphasis on bedding plants, Mums, Snaps.

Includes chapters on various phases of greenhouse management — soil sterilizing, seed germination, greenhouse cooling, plastic greenhouses, etc.

\$2.00, net, postpaid.



GROWER 14

MINIATURE ORANGE TREE

Everbearing Calamondin (*Citrus mitis*)

6 in. Plastic Pots. **\$1.75** ea. F.O.B. Miami, Florida.

9 per carton. 30 lbs. per carton. Shipped by rail, truck or air. **No packing charge.** Plants are shipped with green fruit of pea size to a nickel or bigger. Many plants have both fruit and flowers.

Finest ornamental citrus known. Our immense stock of this "hot item" assures you of well-fruited, shapely plants. Fruit will color in greenhouse or home in three to four weeks. Can be sold in plastic pot or shifted to 7 inch clay.

Sorry, no shipments permitted to states of Arizona, California, Louisiana, Texas, or South Carolina. Descriptive label with each plant.

FICUS decora. 12 to 16 leaves. Moss rooted layers. **60c** each. Packed 25 per carton. **No packing charge.** F.O.B. Florida.

GROWER 1

PHILODENDRON

Finest pole Philodendron. Grower is a specialist in producing quality pole and slab material; grows ONLY pole plants.

P. cordatum. 6 inch pot, 8 plants per pot on 30 inch slab. 8 (in pots) or 10 (out of pots) to a box **\$2.00** Each

P. cordatum. 7 inch pot, 10 plants per pot on 40 inch slab. 6 (in pots) or 8 (out of pots) to a box **3.00**

P. hastatum, panduraeforme, pertusum, laciniatum, or Florida. 6 inch pots, on 30 inch slab. 6 plastic pots to a box .. **2.00**

P. pertusum, panduraeforme, laciniatum, or Florida. 8 inch pots, on 36 inch slab 1 side. 4 plastic pots to a box **5.00**

SPECIMEN PLANTS

P. pertusum, panduraeforme, laciniatum, hastatum, or Florida. 9 inch pots, 40 inch slab 1 side. 3 or 4 to a box **6.50**

P. pertusum, laciniatum, Florida, or hastatum. 9 inch pots, 40 inch round, both sides. 3 or 4 to a box **7.50**

Minimum order 1 box. F.O.B. Orlando, Fla. **No packing charge.**

GROWER 2

PHILODENDRONS A "must" in Foliage Plants — grown by a leading foliage hybridizer

P. Burgundy. Five species hybrid, highly resistant to cold, "shot gun fungus," and bacterial rot. Excellent for totem poles or individual pot plants.

3 in., **60c** each 4 in., **\$1.00** each 6 in., **\$1.75** each

P. cannifolium. Holds up exceptionally well in a home; can go for long period of time without water.

3 in., **60c** each 4 in., **\$1.00** each 6 in., **\$1.50** each

P. emerald queen. A new hybrid. Medium sized, hastate leaves, dark green, resistant to "shot gun fungus" and bacteria.

3 in., 2 plants per pot, **60c** each.

4 in., 2 plants per pot, **85c** each.

5 in., 3 plants per pot, **\$1.00** each.

P. Florida or laciniatum. 2 plants per pot.

3 in., **60c** each 4 in., **75c** each

Packing: 3 in., 35 per carton 5 in., 9 per carton
4 in., 20-25 per carton 6 in., 8-10 per carton

Packing charge, 50c per carton.

GROWER 2 (Cont'd)

BROMELIADS

These extremely versatile, hardy plants are now available in a wide range of varieties and at unbelievably low prices. Minimum order 1 collection, F.O.B. Florida.

20 plants, bare root, for 3 or 4 inch. 10 or more varieties, our choice. **\$25.00.**

50 plants, bare root, Neoregelia marmorata hybrid, for 4 inch or larger. **\$37.50.**

GROWER 3

DIEFFENBACHIA

D. amoena. Dieffenbachia amoena at its very best. Disease-free, large leaves. Very heavy cane.

4 in. pots, ready for 6 in., **65c** each, 25 per carton.

5 in. pots, specimens, **80c** each, 16 per carton.

D. Arvida (exotica). True Arvida with distinct dominating pure white. Greenhouse grown and processed. Quality-plus, beautifully shaped plants.

2½ in. pots, **35c** each, 50 per carton.

3 in. pots, **50c** each, 36 per carton.

PHILODENDRON

P. pertusum (All Character Leaves). Absolutely superb quality, compact, deep leathery green foliage. Shipped from grower who specializes in pertusum and amoena.

4 in. pots, medium. **75c** each. 25 per carton.

4 in. pots, selects. **95c** each. 25 per carton.

Packing, 50c per carton.

GROWER 15

PHILODENDRON

P. cordatum. Shipped from top cordatum grower.

R.C. No. 1 grade, 3 to 5 leaves. **\$60.00** per 1000. Minimum order 500.

2¼ in., 2 plants per pot. **\$16.00** per 100; **\$150.00** per 1000. Minimum order 100.

Packing, 50c per carton.

GROWER 12

DRACAENA

D. Florida beauty. Well colored, heavy. 2-3 tiers of leaves (5 leaves or better). 2¼ in. plastic pot. **\$17.00** per 100; **\$165.00** per 1000. Minimum order 100. **Packing, 50c per carton.** F.O.B. Orlando, Fla.

FIVE IMPORTANT POINTS TO REMEMBER IN GROWING FOLIAGE PLANTS

1. Soil mixtures should be heavily organic. For instance, a mixture of 1 part greenhouse soil, 1 part sand and 2 parts peat moss is good.
2. Regular feeding is important to keep plants growing and in good leaf color.
3. Temperatures should be a **minimum** of 65 to 70°, and higher than this for certain varieties.
4. High relative humidity is important.
5. Shade is important. Light shade during the northern winter months and heavy shade during summer.

GROWER 5

FOLIAGE PLANT COLLECTIONS F.O.B. FLORIDA

BALL SPECIAL FOLIAGE Plant Collections

All plants in smaller sizes, which means less transportation cost. You can either pot them and sell almost immediately as small house plants, or you can grow them on to larger sizes and more profit. We reserve the right to make substitutions of equal or better sizes and varieties in the event of shortages.

25 Chinese Evergreen, R.C., 3 to 5 in.	3 to 6 leaves
15 Dracaena sanderiana, R.C.	5 to 10 leaves
25 Maranta kerchoveana, R.C.	3 to 7 leaves
25 Nephthytis emerald gem, R.C.	3 to 5 leaves
25 Nephthytis green gold, R.C.	3 to 5 leaves
25 Peperomia, variegated, R.C.	3 to 5 leaves
25 Peperomia, obtusifolia, R.C.	3 to 5 leaves
100 Philodendron cordatum, R.C.	3 to 5 leaves
25 Pilea cadierei (Aluminum Plant), R.C.	4 to 8 leaves
25 Pothos Wilcoxi, R.C.	3 to 5 leaves
25 Sansevieria laurenti, 4 to 6 in.	3 to 5 leaves

SPECIAL FOLIAGE PLANT COLLECTION (340 plants) for **\$28.75**
Shipping wt. 18 lbs. approx. (Slightly heavier during winter).

BALL PHILODENDRON COLLECTION (Large-Leaved)

Demand for these large-leaved Philodendrons is increasing fast — and with good reason! Collection contains plants of the four popular leaf types and varieties. Shipped in paper pots.

BALL 4-INCH COLLECTION

- 10 P. pertusum. Most popular large-leaved kind.
- 6 P. hastatum. Excellent for totem poles.
- 4 P. Florida. Nicely lobed; heavy, tough leaves.
- 4 P. panduraeforme. Needs moist, well-drained soil, shade.

24 plants for **\$20.35**.

BALL 3-INCH COLLECTION

- 15 P. pertusum. Most popular large-leaved kind.
- 10 P. hastatum. Excellent for totem poles.
- 10 P. Florida. Nicely lobed; heavy, tough leaves.
- 15 P. panduraeforme. Needs moist, well-drained soil and shade.

50 plants for **\$29.75**.

Our special 5% standing order **discount** from the above prices on orders of 3 or more of the **above 3 collections** or any combination of the three. To assure a continuing supply, order collections shipped at regular intervals. Shipment when you specify.

GROWER 7

FOLIAGE PLANTS FOR COUNTER SALES

5 different varieties, well established in 3½ inch white plastic tubs, ready for immediate resale. F.O.B. Florida. Minimum order 1 case. Plants pictured below.



- | | |
|--------------------------|-------------------------|
| 12 Philodendron cordatum | 6 Maranta kerchoveana |
| 6 Pothos Wilcoxi | 6 Nephthytis green gold |
| 6 Peperomia variegated | |

36 Plants (3½ inch tubs) per carton, **\$11.50**

PHILODENDRON cordatum. 4 inch pot, 4 plants per pot on 15 inch totem. 24 plants per carton, **\$12.00**.

GROWER 10

PREPAID FOLIAGE COLLECTIONS (Prepaid East of the Rockies). Includes Packing.

THE FOLLOWING ARE MONEY-MAKERS FOR SURE — TRY ONE OR TWO

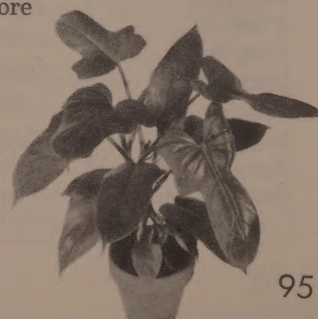
No. 1 PHILODENDRON **\$22.75**
 5 P. pertusum. 4 in., 3 to 5 leaves
 5 P. dubia, 4 in., 3 to 5 leaves.
 5 P. hastatum. 4 in., 4 to 5 leaves.
 5 P. monstera. 4 in., 3 leaves.

No. 2 PHILODENDRON **\$22.75**
 10. P. pertusum. 3 in., 3 to 4 leaves.
 10 P. dubia. 3 in., 3 to 4 leaves.
 10 P. hastatum. 3 in., 3 to 4 leaves.

No. 3 PHILODENDRON **\$25.50**
 7 P. pertusum. 4 in., 3 to 5 leaves.
 7 P. hastatum. 4 in., 4 to 5 leaves.
 6 P. monstera. 4 in., 3 to 4 leaves.

No. 4 PHILODENDRON cordatum **\$18.50**
 72 — 2¼ in. Plastic Pots, each containing 3 or more cuttings.

No. 5 NEPHTHYTIS **\$18.50**
 72 green gold 2¼ in. Plastic Pots, 3 or more cuttings each.



PRICES SUBJECT TO CHANGE WITHOUT NOTICE

COMPLETE LINE OF FOLIAGE PLANTS FROM FLORIDA, CALIFORNIA, TEXAS AND PUERTO RICO. WRITE FOR OUR FOLIAGE CATALOG.



Miscellaneous Plants

AZALEAS. Write for varieties and prices.

CARNATIONS. See pages 83-87.

FOLIAGE PLANTS. See pages 94-95.

GLOXINIAS

BALL GLOXINIA SEEDLINGS WILL FLOWER IN 3 to 4 MONTHS FROM PLANTING. THEY CAN BE GROWN THE YEAR ROUND. TRY THEM!

Imp. Red Velvet. Cardinal-red.

Royal Velvet. Deep purple.

New Cherry Belle. Cherry-red; white border.

Pink Pearl. Rose-red; white center.

Purple Belle. Purple; white border.

Snow Bird. Pure white.

Purple Cloud. Purple; white center.

Imp. Colossal Hybrids. Soft pink to red and wine colors.

Special Formula Mixture. Approximately 60% solid red; 10% solid blue-purple; 15% red and white combinations; 10% blue-purple and white combinations; and 5% solid white.

Gloxinia plants shipped in 2-inch Ball Plant Bands F.O.B. Florida. Price on all varieties and mixture: **\$20.00** per 100; **\$180.00** per 1000. **Minimum order 100 plants**, 25 of a variety. 250 or more plants billed at the thousand rate. Particularly on separate color varieties, we would like to have 30 days notice for shipment.

8F GLOXINIAS — 2 1/4 Inch

Available the year round.

Red	Red and White	White
Blue and White	Blue	Mixed

1 carton (50 plants), **\$20.00**; 2 to 4 cartons, **\$17.50** each; 5 or more cartons, **\$14.75** each.

DOUBLE GLOXINIAS

Red

White and Red

\$45.00 per 100; **\$400.00** per 1000.

Shipped in cartons of 50 **only**, express or airfreight, f.o.b. Lockport, New York. Shipped in insulated cartons October 15 to April 15.

2 INCH BANDED SNAPS SHIPPED IN BALL-PAK

Produced by specialists from originators' F₁ Hybrid seed.

Christina. Light pink.

Citation. Ivory white.

Doubloon. Rich golden yellow.

Gallant Fox. Rosy-bronze.

Golden Spike. Golden yellow.

Hercules. Light pink.

Lavender Lady. Deep rosy lavender.

Libby. Dark rose.

Navajo. Best all-purpose red.

Pink Ice. Bright pink, light lips.

Sierra. Pure white.

Snowman. Pure white.

Treasure Chest. Soft med. rose.

\$65.00 per 1000. F.O.B. Illinois August 1 to February 1. **Minimum order 250**, 25 of a variety. Packed 50 per carton. 250 at 1000 rate.

SNAPDRAGON SEEDLINGS

Grown and shipped in 9 1/2" x 9 1/2" veneer trays holding approximately 200 plants, weight about 4 1/2 lbs. Shipped express only F.O.B. Ill. Available Aug. 1 to Feb. 1.

\$4.25 per tray. **Minimum order 4 trays.**

Varieties:

Snowman	Golden Spike	Doubloon	Christina	Libby
Citation	Lavender Lady	Pink Ice	Navajo	Gallant Fox

PANSY SEEDLINGS

Available October through May f.o.b. Georgia. Packed in display cartons, 20 bunches, 25 plants to a bunch. Plants shipped October through January are NOT in bloom; those shipped February through May are in bloom. **Minimum order 1000.**

Arcadia Jumbo Mix. **\$12.00** per 1000.

Roggli Giants. **\$13.50** per 1000.

Steele's Jumbo Mix. **\$13.50** per 1000.

Pansies also available from Pennsylvania late September through October. Write for varieties and prices.

Bedding Plants—Seedling Trays

Superb seedlings for replacement, addition, or total production. These fine seedlings are ready to transplant upon arrival. **\$5.00** per tray. 300 seedlings guaranteed (usually more). **Minimum order 4 trays.**

Available January 1 to May 1, f.o.b. Mississippi and New Jersey. Shipped by railway express.

PETUNIAS

Ball All-Double Mix

Ball California Giants No. 1

Ballerina

Bingo

Calypso

Cavalier

Comanche Imp.

Crusader

Maytime

Paleface

Pink Magic

Pink Velvet

Sonata

Sugar Plum

Tango

White Magic

MISCELLANEOUS

ALYSSUM

Carpet of Snow

Royal Carpet

AGERATUM

Blue Mink

COLEUS

Ball Rainbow Mix.

DAHLIA

Unwin's Dwarf Mix.

DIANTHUS

Bravo

IMPATIENS

Dwarf Mix.

MARIGOLD

Petite Mix.

Crackerjack

PHLOX

Globe Mix.

PORTULACA

Double Mix.

SALVIA

St. John's Fire

SNAPS

Vacationland Mix.

Rocket Mix.

VERBENA

Ideal Florist Mix.

VINCA

Bright Eyes

Coquette

ZINNIA

Thumbelina



COLEUS-PETUNIA COLLECTION

One tray each of 5 Grandiflora or Multiflora Petunia varieties (Our Selection — 1 white, 1 red, 1 blue, 1 pink, and 1 variegated), and one tray of Coleus Ball Rainbow Mix. **6 trays** (Collection) for **\$26.50.**

MISCELLANEOUS SEEDLING COLLECTION

One tray each of Salvia St. John's Fire, Marigold Petite Mix, Coleus Ball Rainbow Mix, Snap Rocket Mix, Vinca Coquette or Bright Eyes, and Dianthus Bravo. **6 trays** (Collection) for **\$26.50.**

BALL CROWN LILIES



The above is a field of Ball Crown Lilies being debudded. De-budding is practiced so as to reduce the possibility of botrytis (fire) occurring which hinders the bulb development. Old flowers are very susceptible to botrytis; thus all buds should be removed from the plant immediately after opening. There are many similar steps necessary to produce quality Lily bulbs—Ball growers are experienced specialists who devote all their time and effort to producing Ball Crown Lilies.

Ball personnel periodically inspect the Lily fields during the growing season and are always present during the shipping

period. Bulbs are immediately handled with the greatest of care, being transported across the country to the cold storage houses in the Midwest and East via refrigerated trucks, carrying the proper temperature. On arrival at the various cold storage houses, Crown Lilies are placed in controlled temperatures for precooling, and during this period are inspected frequently by Ball representatives.

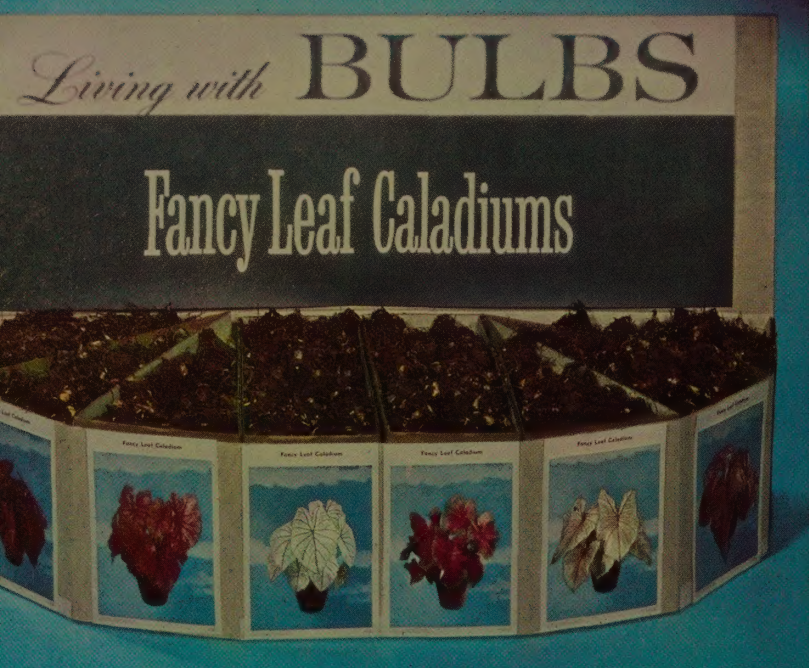
Ball Crown Lilies are winners and with the team work of the grower, the Geo. Ball personnel, and the Geo. Ball salesmen, this combination is hard to beat.

BALL CROWN LILIES (WEIGHT GRADED) CROFT AND ACE, ARE STORED FOR YOUR CONVENIENCE IN COLD STORAGE HOUSES ACROSS THE COUNTRY: JERSEY CITY; PITTSBURGH; TOLEDO; MINNEAPOLIS; DENVER; FT. WORTH; ATLANTA; PHILADELPHIA; KANSAS CITY AND WEST CHICAGO. THESE STRATEGICALLY LOCATED COLD STORAGE HOUSES INSURE A MINIMUM AMOUNT OF TIME IN TRANSPORTATION TO YOU.

DISCOUNTS ON CROFT & ACE, 1962 CROP: 1-9 cases, 2% 10 days; 10-24 cases, 5% 30 days; 25 cases or more, 10% 30 days.

Contact your Ball Salesmen, Geo. J. Ball, Inc., West Chicago, Ill. or Geo Ball Pacific, Inc., Palo Alto, Calif., for your lily needs:

COMPARABLE SIZE GRADE	BALL CROWN CROFT/ACE Weight Graded	No. OF BULBS PER CASE	COMMENT
10 up	Grade No. 100 "SUPER JUMBO"	100	A premium grade of heavy uniform bulbs of maximum bud count.
9/10	Grade No. 150 "JUMBO"	150	Comparable to size grade 9/10. Heavy, uniform bulbs and bud count.
New Grade	Grade No. 175 "FANCY"	175	A new grade between 8/9 and 9/10 size grades in weight and bud count.
8/9	Grade No. 200 "STANDARD"	200	Comparable to size grade 8/9.
7/8	Grade No. 250 "COMMERCIAL"	250	Comparable to size grade 7/8. Contains more uniform, slightly heavier bulbs.



BALL Fancy Leaf CALADIUM DISPLAY PAKS

VARIETIES — 8 varieties in each collection

Candidum. White.

Frieda Hemple. Red.

Buck. Red.

Mrs. Arno Nehrling. Bronze
leaf with pink hue and red
midrib.

White Christmas. White.

Festivia. Rose-red.

Bonnett. Pink.

Fannie Munson. Pink.

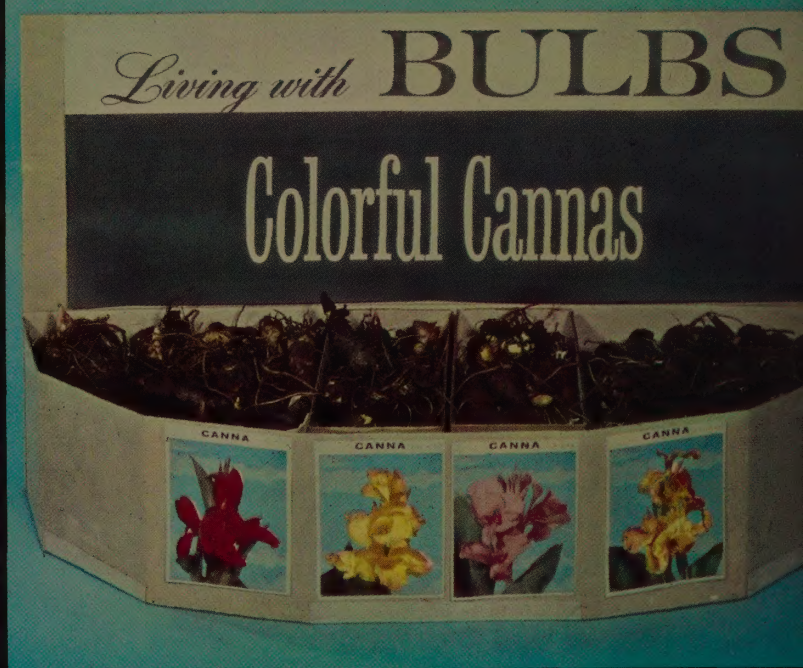
Above varieties are available in three bulb sizes. Candidum and Frieda Hemple double quantity in each collection; other varieties equal quantity. F.O.B. Florida. Available December on.

JUMBO COLLECTION. 100 bulbs **\$26.50**

#2 CALADIUM COLLECTION. 300 bulbs **\$27.50**

#1 CALADIUM COLLECTION. 200 bulbs **\$33.50**

Note. Order Caladium Display Paks by size!!! See also page 101.



BALL COLORFUL CANNA DISPLAY PAK

An excellent item to add interest to your sales line. Large showy flower heads provide a glorious display from spring to frost. Our Cannas are high quality 2 to 5 eye divisions.

VARIETIES AND DESCRIPTIONS

50 **City of Portland.** Large pink flowers, green foliage, medium height.

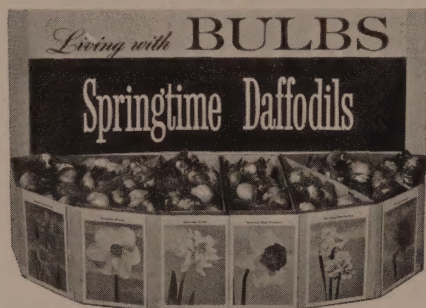
75 **President.** Extra large, bright red flowers, green foliage, dwarf.

50 **Richard Wallace.** Large yellow flowers, green foliage, medium.

75 **Wyoming.** Large, dark orange flowers, bronze foliage, medium.

250 Bulbs, **\$19.50**

Available January through spring. F.O.B. West Chicago.
See page 101 for additional Cannas.



BALL SPRINGTIME DAFFODIL Display Pak

Here is a collection of the most popular Daffs in the largest sizes grown.

VARIETIES:

50 **King Alfred**

50 **Fortune**

40 **Actaea**

40 **Twink**

40 **Dick Wellband**

40 **Cheerfulness**

260 DN #1 Bulbs, **\$29.50** F.O.B. West Chicago

BEARDED IRIS DISPLAY COLLECTION PREPAID

This collection contains six colors — pink, red, blue, gold, white and purple. The display box contains six compartments with 12 rhizomes in each compartment. Each rhizome is marked to indicate color, and the color is imprinted on each compartment. Available July thru November.

\$25.00 per case, **PREPAID** anywhere in continental United States.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE. OFFERED SUBJECT TO CROP.

MISCELLANEOUS BALL BULB DISPLAY PAK

A well-balanced collection of the most popular spring flowering bulbs, packed in our colorful Ball Display Pak similar to the Caladium carton pictured above. F.O.B. West Chicago, fall 1962

Each collection contains:

200 Tulips, 12/up. 50 each: Red, Pink, Bicolor, and Yellow

90 Daffodils. 50 **King Alfred** DN #2
40 **Cheerfulness** DN #1

75 Hyacinths, 18/19. 25 each: White, Pink, Blue

365 bulbs (Collection), **\$32.50**

ANEMONE "TECOLOTE" GIANTS

Anemones are extremely popular as a fall item in the West, Southwest, and South, and as a spring item in the rest of the U.S. The "Tecolote" strain produces young, vigorous, high-crown bulbs as opposed to the old flat bulbs found in other strains. Available September to May.

St. Bridg. Double flowering mixture. $\frac{5}{8}$ - $\frac{3}{4}$ " diam.

Monarch De Caen. Single mixture. $\frac{5}{8}$ - $\frac{3}{4}$ " diam.

Display Pak Collection: 500 each of the above 2 varieties, F.O.B. California, **\$31.00.**

Above varieties sold separately, **\$30.00** per 1000.

Living with BULBS

Tuberous Rooted Begonias



BALL TUBEROUS ROOTED BEGONIA DISPLAY PAK

Excellent for all summer bloom in pots or in beds. This collection has a wide range of colors.

These are choice Belgian-grown double Camellia-flowered Begonias. A best seller. **Bulb size 2¼ in. and up.**

8 VARIETIES

20 each, **White, Salmon, Orange, Copper, Crimson, and Yellow.**

40 each, **Scarlet and Rose.**

200 bulbs, **\$39.50.**

Available January, February, March, and April. F.O.B. West Chicago. See page 100 for additional Begonias.

Living with BULBS

Gala



Glads



BALL GALA GLAD DISPLAY PAK

This collection has a good range of colors from pastels to dark shades.

Ball Gala Glads are grown by experts. Each bulb is carefully graded and rigidly inspected by state inspectors as well as the grower, thus assuring Ball Customers the best quality available.

VARIETIES

Sans Souci
Margaret Beaton
Jo Wagenaar
Gene
Friendship

Spic & Span
Snow Princess
Elizabeth The Queen
Orange Gold
Yellow Herald

500 Jumbo bulbs, 50 of each variety, **\$17.95.** F.O.B. West Chicago. See page 102 for additional Gladioli.

BALL GARDEN TULIP DISPLAY PAK

500 Tulip Bulbs, size 12/up, attractively displayed, ready to sell on sight. F.O.B. West Chicago. Available fall, 1962. Each collection contains:

- 50 **Ingahume** (red and yellow)
- 50 **Mr. Zimmerman** (pink and white)
- 50 **Pride of Haarlem** (red)
- 50 **Utopia** (red)
- 50 **Clara Butt** (salmon pink)
- 50 **Rose Copeland** (rose)
- 50 **Golden Measure** (canary yellow)
- 50 **Golden Harvest** (lemon yellow)
- 50 **Unsurpassable** (purple)
- 50 **Duke of Wellington** (white)

500 bulbs (Collection), **\$27.50.**

RANUNCULUS "TECOLOTE" GIANT

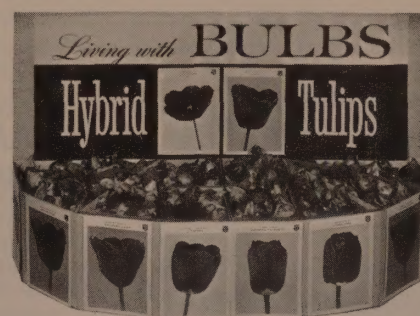
Separate Color Display Carton

Ranunculus have become one of the largest selling fall items in the West, Southwest and South, and are increasing in popularity as a spring item thruout the rest of the U. S. The "Tecolote" strain is known thruout the world to be by far the finest; producing huge, fully double, ruffled and smooth-edged, Camellia-like blooms. This display contains 250 bulbs each of 5 colors — **Red, Pink, Yellow, White, and Bronze** — in the large 5/8-¾" size.

1250 bulbs (Collection), **\$32.50.**

F. O. B. California. Available September thru May.

HYBRID TULIP Display Pak



Contains 10 selected Red Hybrid Tulip varieties, the most popular Tulip color.

VARIETIES

Antwerpen **General Eisenhower** **Apeldoorn** **Oxford**
Lefebvre's Favorite **Roosevelt** **Queen** **Parade**
Dr. Phillips **Dover**

500 bulbs, 50 of each variety, **\$34.50**
F.O.B. West Chicago, Illinois

FOR A COMPLETE LISTING OF BULBS . . .
INCLUDING GLOXINIAS, DAFFODILS, NARCISSUS,
HYACINTHS, CROCUS, CALLA LILY, TULIPS, ETC.
WRITE FOR OUR 1962 - 1963 BULB CATALOG

MISCELLANEOUS LILIES

ERABU (Japanese-Grown)

White Trumpet Lily for midwinter and spring flowering. Available September. Sold in case lots only. F.O.B. Kansas City, West Chicago, Toledo, Jersey City, and Fort Worth.

Size	Bulbs per Case	Per Case	Size	Bulbs per Case	Per Case
6-8	400	\$43.50	8-10	100 (Baby)	\$22.50
7-9	300	41.50	9-10	200	39.50
7-9	150 (Baby)	26.50	9-10	100 (Baby)	26.50
8-10	225	39.50	10-11	150	38.50

GEORGIA (Florida-Grown)

Although some growers use the Georgia Lily for Easter pot plants, most Georgias are grown for the earliest cut-flower crop. Properly pre-cooled bulbs planted in mid-September will flower in early January. Bulbs available from September on. Sold in case lots only. F.O.B. West Chicago, Atlanta, Jersey City cold storage, or Florida field.

Size	Bulbs per Case	Per Case	Size	Bulbs per Case	Per Case
6½-7	300	\$53.00	9-10	150	\$58.00
7-8	250	58.00	10-up	100	53.00
8-9	200	65.00			

ALBUM (White Rubrum)

Speciosum — White Champion Strain.
Size 7-8, \$56.00 per 100.
F.O.B. Oregon, October delivery.

Size 8-9, \$72.00 per 100.

RUBRUM (Carmine-Pink)

Speciosum — Red Champion Strain.
Size 7-8, \$36.00 per 100.
F.O.B. Oregon, October delivery.

Size 8-9, \$45.00 per 100.

AURATUM PLATYPHYLLUM

Size 7-8, \$50.00 per 100.
F.O.B. Oregon, October delivery.

Size 8-9, \$60.00 per 100.



AMERICAN LILY DISPLAY COLLECTIONS

Available October through Spring. This includes the newer American varieties that are finding wide acceptance among American gardeners. The bulbs are packed in peat moss and polyethylene bags, each variety in a separate bag. The display box contains a compartment for each variety. Five collections are offered. Please state the collection you want.

ECONOMY COLLECTION C-5

Write for prices and list of separate varieties.

AMERICAN LILY STORE COLLECTION C-1 \$32.00

150 Lilies, 25 each of 6 varieties listed below. Packed 25 bulbs in a plastic bag. Attractive color banner and individual pictures included.

Enchantment	Fiesta Hyb.	Golden Chalice Hyb.
Mid-Century Mix	Olympic Hyb.	Valencia

AMERICAN LILY FORCING COLLECTION C-2 \$36.00

150 Lilies packed in attractive shipping crate. 25 each of the following:

Harmony	Destiny	Joan Evans
Croesus	Enchantment	Cinnabar

AMERICAN LILY DISPLAY COLLECTION C-3 \$48.00

144 Lilies, 6 varieties, one variety per compartment. Bulbs are specially packaged in attractive transparent polyethylene bags of 3 bulbs each with peat moss. Attractive color labels included, but no color banner. Varieties included are:

Auratum Platyphyllum	Enchantment	Golden Clarion
Olympic Hyb.	Pink Perfection	Red Champion

AMERICAN LILY CENTURY COLLECTION C-4 \$30.00

100 Lilies, 4 varieties, each bulb individually packed in polyethylene bag, with color label—in attractive color printed display case. Varieties:

Golden Clarion	Olympic Hyb.	Prosperity	Enchantment
----------------	--------------	------------	-------------

ECONOMY COLLECTION C-5 (Pictured at left) \$28.00

100 Lilies, 4 varieties, in lots of 25. Each variety packed in polyethylene bag with peat. The following varieties are included:

Royal Gold	Enchantment	Prosperity	Olympic Hybrids
------------	-------------	------------	-----------------

All the American Lily collections F.O.B. Oregon.

BEGONIAS (Display-Paks, see page 99).

TUBEROUS ROOTED BEGONIAS

BELGIAN-GROWN BEGONIAS — Double Camellia-Flowered

Scarlet Yellow	White Orange	Copper Crimson	Salmon Assorted (5 colors)	Rose
-------------------	-----------------	-------------------	-------------------------------	------

Minimum order 100 bulbs — 25 of a variety. Shipped F.O.B. West Chicago. December through March. 250 at 1000 rate.

Size of bulb	Per 100	Per 1000
1½-1½ in.	\$ 9.00	\$ 60.00
1½-2 in.	11.00	90.00
2 in. up	17.00	135.00

JIFFY-POT BEGONIA COLLECTION

250 bulbs, 250 pots, shipped together at the proper time for starting, will give you the makings of a profitable Tuberous Begonia offering next spring.

250 Assorted Tuberous-Rooted Begonia bulbs, 1½-2 in., Belgian-grown, **Double Camellia-Flowered**. 25 each: white, salmon, orange, copper, crimson, yellow. 50 each: scarlet, rose.

250 Jiffy-Pots, 3½ in. Shorties.

\$29.50 F.O.B. West Chicago

MARK ORDER "JIFFY-POT BEGONIA COLLECTION"

TUBEROUS BEGONIA COLLECTION

Belgian-grown, **Double Camellia-Flowered**. Available January through spring. Collection contains:

25 each: White, Salmon, Orange, Copper, Crimson and Yellow.

50 each: Scarlet and Rose.

250 1½-inch Bulbs (Collection), \$27.50. F.O.B. West Chicago.

AMERICAN TUBEROUS BEGONIA COLLECTIONS

In Counter Display Carton

Ruffled Doubles in five colors, our choice, in a well balanced assortment, each item separately illustrated in color.

200 Tubers, 1½-2" (40 each of 5 colors), **\$32.50.**

Hanging Basket (Pendula) in five colors, our choice.

200 Tubers, 1½-2" (40 each of 5 colors), **\$35.50.**

F.O.B. California. Available January.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE. OFFERED SUBJECT TO CROP.

CALADIUMS

FANCY LEAF VARIETIES

Ball Caladium bulbs are top-quality, Florida-grown. In the event of shortages of sizes you order (some varieties do not make Mammoth or Jumbo bulbs) we will ship the largest available size rather than a different variety. Minimum order 100 bulbs. F.O.B. Florida. Available from December on.

- Aaron.** Creamy white center; narrow green border.
Ace of Hearts. Dwarf. Rose center, green border, scarlet ribs.
Candidum. White with green veins. Tops for pots and bedding.
Carolyn Whorton. Rose, darker veins and green hue. Fine for pots.
Crimson Wave. Crimson with dark green border.
Dr. Groover. Blotched pink. A good pot variety.
Dr. T. L. Meade. Bronze-red leaves; bright red midribs, veins.
Edna. Large glossy leaves. Brilliant red. Excellent pot plant.
Fannie Munson. Acclaimed best solid pink, excellent for pots.
Festivia. Coppery red, green veined. Superb pot plant.
Freckles. Pink blotches on green, red veined. Bedding and pots.
Fred Bause. Red, low growing; excellent for bedding and pots.
Frieda Hemple. Dwarf. Best all-purpose red.
Itacapus. Dark red with small, brighter red spots. Good bedder.
John Peed. Popular red for bedding and pots. Good leaf.
June Bride. The whitest of whites. A "must" for pots.
Kathleen. A distinctive pink; strong, low-growing leaves.
Lord Derby. Rose-pink, dark ribs, narrow green border.
Lord Rosenbury (Rosebud). Red-rose center, light green border.
Marie Moir. White flecked with red and pink. Good bedder.
Mrs. Arno Nehrling. Bronze to white, pink hue, red midribs.
Mrs. F. M. Joyner. White in inside culture; copper-red outside.
Pink Lady. Pink leaf with red midribs, narrow green border.
Pocile Anglais. Deep crimson leaf bordered metallic green.
Ruby Smith. Dominantly pink. A "must" for bedding and pots.
Sea Gull. White lacy network on green background. Bushy.
Sunburst. Bright red center with red spots surrounded by gold hue on green background. Medium size, very bushy.
Susan. Dominantly pink; red ribs, green hue.
Texas Beauty. Dwarf. Bronze-green leaf heavily blotched with pink; bright red midribs. Excellent bedder and pot.
Thos. Tomlinson. Red with narrow green margins. Pots and bedding.
White Christmas. White; green midribs.

	No. 2 1-1 1/2 in.	No. 1 1 1/2-2 1/2 in.	Jumbo 2 1/2-3 1/2 in.	Mammoth 3 in. up
Per 100	\$12.00	\$ 17.50	\$ 25.00	\$ 35.00
Per 1000	90.00	150.00	230.00	310.00

250 bulbs at 1000 rate.

DISPLAY-PAK CALADIUMS. See page 98.

STRAP LEAF (Lance) VARIETIES

Heaviest Leaf Texture of all Caladiums.

Normally the largest obtainable in the following varieties are the No. 1's. Many varieties do not make No. 1's. If you are interested in the largest bulbs, please submit your order to read "the largest size available."

- Ace of Spades.** Red, blotched throughout with pink and green.
Dutch Frill. Dark maroon leaves with green border, many leaves.
E. O. Orpet. Crimson-red and green center with scarlet midrib.
Elizabeth Lou. Deep green ribs on magenta background.
Horatio Sid. Light green with dark green overcast; scarlet edge.
Juno. A nice combination of red, pink, white and green.
Mumbo. Rose-pink, scarlet midriff, ribs, and veins; green edge.
Okeechobee. Mottled green and red. Good leaf substance.
Pink Charmer. Top pink strap.
Pothos. Green and white variegated. Hardy.
Red Frill. Very bright red leaves with frilled edges. Many leaves.
Rosalee. Shiny red leaves with green border.
Rose Frill. Very bright rose leaf with frilled edges.
White Glory. White with crimson edge; green ribs and veins.
White Wings. White-green splotted with bright red; green veins.

	No. 2 3/4-1 in.	No. 1 1-1 1/2 in.	Jumbo 1 1/2-2 1/2 in.
Per 100	\$12.00	\$ 17.50	\$ 25.00
Per 1000	90.00	150.00	230.00

F.O.B. Florida. Delivery late December on.



CANNAS

NEW DWARF CANNAS

A most excellent item to add new interest to your sales line. These new varieties have large showy flower heads; fine clear color tones; grow normally about 30 inches tall. Guaranteed 2-5 eye.

Ideal for the low, modern ranch-type house; and provides a glorious display from spring to frost. Disease free.

Pfitzer Cherry Red. A new shade in Cannas — a flashing cherry red that does not fade. Light, bright green foliage.

Pfitzer Primrose Yellow. Clear, fine yellow. Flowers of fine substance contrasting well with deep green foliage.

Pfitzer's Chinese Coral. Exciting tones of pink. Plants look bright at all times, as blossoms tend to shed cleanly.

Pfitzer Salmon Pink. Beautiful combination of luminous buff to salmon. Flower heads are very large.

Prices above four, each: Less than 100, **30c** each; **\$25.00** per 100; **\$210.00** per 1000. Minimum order 50.

Available Fall 1962, Spring 1963, F.O.B. California.

GRAND OPERA SERIES

These are the varieties which have brought Cannas back into popularity with their large, showy flower heads in delightful pastels and bushier growing habits. Time was when Cannas were unpopular because of their rank growth and muddy colors; whereas the GRAND OPERA SERIES are pleasing all parts of the country. Guaranteed 2-5 eye.

Aida. Large trusses of orange-salmon to old rose; rich color.

La Boheme. Lovely tones of soft peach-pink and coral.

La Traviata. Lively shade of old rose. Vigorous and most dwarf.

Mme. Butterfly. Delicate pastel tints of pearly pink, yellow tints.

Mignon. Giant heads of peach to rose. Tallest growing.

Rigoletto. Fine clear canary yellow; a most excellent color.

Prices above six, each: Less than 100, **18c** each; **\$16.00** per 100; **\$135.00** per 1000. Minimum order 50.

Available Fall 1962, Spring 1963, F.O.B. California

CANNAS — STANDARD VARIETIES

RED — GREEN FOLIAGE

President. Extraordinarily large bright red. Dwarf.

Rosamond Cole. Extra large red flower; gold edge. Dwarf.

RED — BRONZE FOLIAGE

Ambassador. Cherry red; dwarf.

Red King Humbert. Large, light red. Tall.

YELLOW — GREEN FOLIAGE

Richard Wallace. Large, solid yellow.

Yellow King Humbert. Large, yellow variegated. Tall.

ORANGE — BRONZE FOLIAGE

Wyoming. Large dark orange. Medium.

PINK — GREEN FOLIAGE

City of Portland. Large pink. Medium.

Hungaria. Large dark pink. Dwarf.

Available January through spring months F.O.B. West Chicago only.

Prices above Cannas, each: **\$9.50** per 100; 250 for **\$20.00**; 500 for **\$35.00**; 1000 for **\$60.00**. Minimum order 100, 50 of a variety.

DISPLAY-PAK CANNAS. See page 98.

BALL GALA GLAD COLLECTIONS

No. 1

- 250 **Friendship**. Fine pink.
- 250 **Spic & Span**. Deep, ruffled pink.
- 250 **Jo Wagenaar**. Dark red.
- 250 **Elizabeth The Queen**. Ruffled lavender.
- 250 **Snow Princess**. Tall white.
- 250 **Gene**. Early ruffled yellow.

1500 No. 1 Bulbs (Collection), **\$39.50**

No. 2

- 500 **Friendship** 500 **Elizabeth The Queen**
- 500 **Spic & Span** 500 **Snow Princess**
- 500 **Jo Wagenaar** 500 **Gene**

3000 No. 2 Bulbs (Collection), **\$49.50**

Above Gala Glad Collections F.O.B. West Chicago. Pictures included, but NOT Display-Packed.

BALL GALA GLADS (DISPLAY-PAKS, see page 99)

Ball Gala Glads are American-grown by Expert Glad people. Each bulb is carefully graded and rigidly inspected by state inspectors as well as the grower, thus assuring Ball customers of the best quality available. All bulbs shipped F.O.B. West Chicago. Available December through May.

RED	No. 1 (1½ in. up)		No. 2 (1¼-1½ in.)	
	Per 100	Per 1000	Per 100	Per 1000
Fire King . Bright scarlet-red	\$3.60	\$33.00	\$3.05	\$27.50
Happy End . Early scarlet, yellow throat	3.15	28.50	2.15	19.50
Jo Wagenaar . Excellent dark red	3.05	27.50	2.15	19.50
Sans Souci . Huge, rich scarlet	3.15	28.50	2.15	19.50
Valeria . Popular early light scarlet	3.60	33.00	3.05	27.50
Viking . New red similar to Valeria	4.10	37.50	3.60	33.00

ORANGE & YELLOW

Gene . Frilled light yellow	3.05	27.50	2.15	19.50
Gold . Outstanding golden yellow	3.60	33.00	3.05	27.50
Hopman's Glory . Yellow	3.60	33.00	3.05	27.50
Orange Gold . Finest tall orange	3.05	27.50	2.15	19.50
Yellow Herald . Rich, ruffled yellow	3.05	27.50	2.15	19.50

LAVENDER & PURPLE

Benjamin Britten . Lavender-mauve	3.25	29.50	2.40	21.50
Country Girl . Tall light lavender	3.60	33.00	3.10	29.50
Elizabeth The Queen . Ruffled lavender	3.15	28.50	2.15	19.50
Lavender Beauty . Tall, light lavender	3.15	28.50	2.15	19.50
Mother Anne . Orchid lavender	4.25	39.00	3.60	33.00
Mabel Violet . Purple	3.15	28.50	2.15	19.50

WHITE & CREAM

Florence Nightingale . Tall white	3.15	28.50	2.15	19.50
Lorelei . Tall cream-white	3.60	33.00	3.10	28.00
Margaret Beaton . White, cherry throat	3.05	27.50	2.15	19.50
Pacifica . Ruffled white	3.05	27.50	2.15	19.50
Snow Princess . Early creamy white	3.05	27.50	2.15	19.50
White Gold . Cream shading to gold	3.15	28.50	2.15	19.50

PINK, ROSE & SALMON

Dixie Jewel . Clear, medium pink	3.25	29.50	2.40	21.50
Elmer's Rose . Ruffled deep rose	3.15	28.50	2.15	19.50
Ethel Cave Cole . Fine light pink	3.15	28.50	2.15	19.50
Friendship . Shell-pink	3.05	27.50	2.15	19.50
Margaret Fulton . Deep rose-pink	3.05	27.50	2.15	19.50
Rose Spire . Light rose; white throat	4.10	37.50	3.60	33.00
Spic & Span . Finest ruffled salmon-pink	3.05	27.50	2.15	19.50
Summer Queen . Ruffled, pleasing salmon	3.60	33.00	3.10	28.00
Sweet Sixteen . Medium pink	3.25	29.50	2.40	21.50
Traveler . Rose-pink	4.10	37.50	3.60	33.00
Wild Rose . Beautiful rose, clean throat	3.60	33.00	3.10	28.00

Minimum order 500 bulbs, 100 of a variety. 250 or more at 1000 price. Write for quantity prices.

BELGIAN GROWN GLOXINIAS

We offer these varieties from selected stock:

- Emperor Frederic**. Scarlet bordered white.
- Emperor William**. Violet bordered white.
- Etoile de Feu**. Scarlet.
- Blanche de Meru**. Rose; white throat.
- King of the Reds**. Dark crimson.
- Meteor**. Bright scarlet.
- Mont Blanc**. White.
- Queen Wilhelmina**. Carmine pink.
- Prince Albert**. Dark violet.
- Princess Elizabeth**. Blue, white throat.
- Violacea**. Soft violet.
- Kegeljani**. White.
- Tigrinia Mixed**. Spotted and netted, all colors.

	Per 100	Per 1000
1½-2 in.	\$21.00	\$175.00
2 in. up	25.00	225.00

Minimum order 100 bulbs — 25 of a variety. 250 at 1000 rate. F.O.B. West Chicago. Available December through February.

HOLLAND BULB COLLECTION

A carefully selected group of Hyacinths, Tulips, Crocus, and Narcissus to serve the needs of the beginner in retail dry bulbs. This collection is NOT display-packed and does NOT include baskets. It does include colored pictures to create and encourage sales. Each collection contains:

- 75 Hyacinths: 25 each **Blue**, **Pink**, and **White** — Size 15/16
- 100 Narcissus: **King Alfred** — Size DN # 2
- 1000 Tulips: 11/12
 - 100 **Paris** (Triumph)
 - 100 **Bartigon** (Darwin)
 - 100 **Clara Butt** (Darwin)
 - 100 **Insurpassable** (Darwin)
 - 100 **Kansas** (Triumph)
 - 100 **Golden Harvest** (Cottage)
 - 100 **Princess Marg. Rose** (Cottage)
 - 100 **Oxford** (Darwin Hybrid)
 - 50 **Blue Parrot** (Parrot)
 - 50 **Fantasy** (Parrot)
 - 100 **Red Emperor** (Fosteriana)
- 250 **Crocus** — Mixed

\$59.50 F.O.B. West Chicago. F.O.B. New York if order is received by Aug. 1.

BULBS IN BASKETS

These bulbs are packed in attractive, sturdy bulb baskets. They are available in several kinds of bulbs and are "ready to display" when received. Try several baskets for increased sales and profits.



UNIT # 3 HOLLAND HYACINTH COLLECTION (No Shoes)

150 Hyacinths — 18/19 **\$23.00**
Consists of 1 medium basket of 3 varieties, 50 each White, Blue, and Pink.

UNIT #4 HOLLAND TULIP COLLECTION (No Shoes)

500 **Red Emperor** **\$29.50**
Consists of 1 medium basket containing 500 select Red Emperor Tulips — the king of the red garden Tulips.

Above collections F.O.B. West Chicago.
F.O.B. New York if order is received by July 15.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE
OFFERED SUBJECT TO CROP

PRECOOLED IRIS

"Precooled Iris" will flower earlier than regular Iris and more uniformly. Iris are precooled at 48°. Wedgewood requires 2 weeks less precooling than other varieties, therefore making 2 shipments necessary on mixed orders. Precooled Iris should be planted immediately on arrival.

VARIETIES (For Precooling)

Wedgewood and **Blue Ribbon**, sizes 9/10, 10/11 and 11/up only. Available mid to late October on Wedgewood; mid-November on Blue Ribbon.

White Perfection, Golden Harvest, Snowdrift, Moonlight, White Superior and **Pacific Gold**, size 8/9 only. Available mid-Nov.

F.O.B. principal city nearest you, if order is received by August 15. Minimum order 1000, 250 per variety and size. Less than minimum, F.O.B. West Chicago. Add \$2.00 per 1000 to regular price for Precooled Iris.

Note: Orders for Iris received after August 15 will be shipped from West Chicago ONLY. Retarded and Retarded/Precooled Iris also available from West Chicago ONLY.

IRIS SCHEDULES

Iris can be flowered from Christmas through early May on a scheduled program by using precooled and retarded-precooled bulbs. We will be happy to schedule an Iris program for you and ship the bulbs "ready to force" at the appropriate time, anywhere in the U.S. (except Alaska and Hawaii).

Send us this information and we will custom-design an Iris program to meet your needs.

1. Number of bulbs to flower per week.
2. Variety and color preference (Wedgewood, Blue Ribbon, White Perfection and Golden Harvest **only**).
3. Length and width of each bench or bed.
4. Forcing temperatures available. Need 55-58° for early forcing; 50-53° for later on.
5. Start flowering and stop flowering dates.
6. Should we do the precooling.
7. Orders for schedules must be in our office by September 1.

Geo. J. Ball, Inc., Grower Service Dept., can and will schedule Iris for flowering December through May, just for the asking. Use this service.

IRIS (Regular) American Grown

All our Iris are heat cured after harvesting on the West Coast. Heat curing prepares the bulbs for uniform forcing.

Varieties and prices of Regular Iris. All prices per 1000 bulbs.

	8 1/2/9		9/10		10/11		11/up	
	1000	5000	1000	5000	1000	5000	1000	5000
Wedgewood								
Light blue	\$21.00	\$20.00	\$35.00	\$33.50	\$49.50	\$48.50	\$55.00	\$53.50
Blue Ribbon								
Dark blue	21.00	20.00	35.00	33.50	49.50	48.50	55.00	53.50

	6/7		7/8		8/9	
	1000	5000	1000	5000	1000	5000
Imperator. Blue	\$16.00	\$15.00	\$23.50	\$22.50	\$31.50	\$29.50
Van Vliet. Blue	16.00	15.00	23.50	22.50	31.50	29.50
Golden Harvest. Yellow	19.50	17.50	31.50	29.50	47.00	45.00
Moonlight. Yellow	19.50	17.50	31.50	29.50	47.00	45.00
Pacific Gold. Yellow	19.50	17.50	31.50	29.50	47.00	45.00
Yellow Queen. Yellow	19.50	17.50	31.50	29.50	47.00	45.00
Joan of Arc. White	19.50	17.50	31.50	29.50	47.00	45.00
Snowdrift. White	19.50	17.50	31.50	29.50	47.00	45.00
White Perfection. White	19.50	17.50	31.50	29.50	47.00	45.00
White Superior.	19.50	17.50	31.50	29.50	47.00	45.00
The Orchid.	19.50	17.50	31.50	29.50	47.00	45.00

All prices are F.O.B. principal city nearest you if order is received by Aug. 15. Minimum order 1000 bulbs — 250 per variety. Available September on.

Orders for less than 1000 (250 minimum of size and variety) or received after Aug. 15 will be shipped F.O.B. West Chicago.

FOR A COMPLETE BULB LISTING AND PRICES WRITE FOR OUR LATEST BULB CATALOG

PRICES SUBJECT TO CHANGE WITHOUT NOTICE. OFFERED SUBJECT TO CROP.

3 ways to profit with *"Harvest Giant" Mums* T. M.

1 AS A SPRING FLOWERING POT PLANT

Harvest Giants will flower in May — no light-no shade. Just like other garden varieties, but with flowers twice as large!

This is an opportunity to offer your customers Harvest Giants in bloom in May. A plant that can be set out in the garden to flower again for a real show in the fall.

HERE'S HOW:

- Pot one cutting per 3 in. pot on Feb. 21, or March 1, pinch 2 weeks later, grow at 60° night temperature no light no shade.
- Plants in full bloom mid-May.
- Disbud for larger flowers.

When ordering Harvest Giant Mums, ask for **Giant Collection E** — which is made up of 50 rooted cuttings each of 4 varieties (our choice) from "Short Variety" list, page 105. Forty cultural booklets included (see below).

2 AS A SEPTEMBER CUT FLOWER

Under glass or right outdoors Harvest Giants will produce fine quality large standard Mums from early September to mid-October, giving you large flowered Mums without the use of black shade cloth or lights:

HERE'S HOW:

- Order cuttings for mid-May delivery.
- Plant directly to greenhouse bed or directly to outdoor beds.
- Pinch about a month later with a second pinch given no later than July 15.
- Space at least 8 in. x 8 in.
- Prune to 3 or 4 stems per plant.
- Disbud like you would for standards for large flowers.

When ordering Harvest Giant Mums for cut flower use, ask for **Giant Collection F**. This collection is made up of 100 rooted cuttings each of 4 varieties (our choice) from "Medium to Tall" variety list, page 105.



Varieties like **SEPTEMBER SONG** pictured above make excellent no light, no shade spring flowering pots. See above, left for details.

3 AS A GARDEN MUM — POTTED PLANTS FOR SPRING SALES

As potted plants, plant one cutting to a 3 inch Jiffy-Pot in early April, give a soft pinch in 2-3 weeks and you have Harvest Giants ready for sales as bushy, well developed plants for late May, no light, no shade. Night temperatures of 50°, or better yet 45° (and cool days) retard the tendency toward premature buds.

When ordering Harvest Giants for potted plants for spring sales, ask for **Giant Collection G**. This collection is made up of 50 cuttings each of 4 varieties (our choice) from "Short Variety" list, page 105. Forty cultural booklets included.

For your customers! An 8 page booklet titled "Tips on growing 'Harvest Giant' Mums."

This well illustrated booklet on how the home gardener can grow large flowered (6" or better) Harvest Giants will be supplied with all orders for Harvest Giants. 4 color cover.



HARVEST GIANT COLLECTIONS

Giant Collection E. 50 cuttings of 4 varieties for spring pots (our choice). Total 200 cuttingsPrice **\$31.80***

Giant Collection F. 100 cuttings of 4 varieties for cut flower use (our choice). Total 400 cuttingsPrice **\$62.40***

Giant Collection G. 50 cuttings of 4 varieties for potted plants for spring sales (our choice). Total 200 cuttings.Price **\$31.80***

*Discounts — you can save by ordering early! If a collection is ordered:

- 18 weeks before delivery date, discount will be 11%;
- 12 weeks before delivery date, discount will be 8%;
- 6 weeks before delivery date, discount will be 5%.

Discounts apply only if invoice is paid within 28 days.

ORDER CUTTINGS NOW!!! AVAILABLE VARIETIES LISTED BELOW

Plant Patents: Since these varieties are so unique in the garden Mum field, plant patents have been granted. Therefore, asexual

reproduction of these plants is strictly prohibited under the plant patent laws.

SHORT VARIETIES — varieties in this group are especially well suited for spring flowering pots and general garden use.

Bronze Song (PAF). A bronze sport from the variety September Song. Makes an excellent no light, no shade pot plant variety. Flowers mid-September.

Gold Dust (Pat. 2006). Bright golden yellow flowers up to 5" in diameter. Free flowering. Flowers early September.

Pumpkin (Pat. 1978). A soft golden-bronze incurved. This variety also makes an excellent spring no light, no shade pot plant. Flowers late September.

Red Pumpkin (PAF). Bright red sport from the variety Pumpkin. Will work fine in a no light, no shade spring pot schedule. Flowers late September.

September Song (Pat. 2001). Excellent rose-pink semi-incurved. Makes an excellent spring no light, no shade pot plant. Flowers mid-September.

MEDIUM TO TALL VARIETIES — these varieties make excellent greenhouse, outdoor or garden cut flower varieties.

Autumn Leaves (PAF). A two tone apricot-bronze semi-incurved. Good flower form with good plant habit. Flowers mid-September.

Base Price of all Harvest Giant varieties except collections: **\$116.00** per 1000, if ordered 26 weeks in advance. For details, see table below.

MEDIUM TO TALL VARIETIES (Cont'd)

Full Moon (Pat. 2005). Pure white incurved standard with flowers that will measure up to 6" in diameter. Flowers late September.

Golden Arrow (PAF). A deep golden yellow incurved. A real football type flower. Flowers late September.

Indian Summer (Pat. 2003). A deep bronze with a golden reverse. A popular favorite. Flowers of this variety may attain a size of 6½ inches. Flowers mid-September.

Redskin (Pat. 2004). Vivid burgundy red. Reflex type flowers that will measure up to 5 inches. Flowers early October.

Touchdown (Pat. 2002). This superb deep rose-pink standard produces flowers up to 6½ inches in diameter. Flowers early October.

White Frost (Pat. 2007). Pure white semi-incurved with flowers up to 5 inches. Flowers late September.

Yellow Frost (PAF). A yellow sport from the variety White Frost. Semi-incurved with flowers up to 5 inches in diameter. Flowers late September.

Yellow Moon (PAF). A medium deep yellow sport from the variety Full Moon. This variety produces large yellow flowers like the plant it sported from. Flowers late September.

PRICES

Prices on all Mums (except Collections) are computed as follows:

1. Take base price (per 1000) as shown with each variety.
2. If you order less than 1000 cuttings of any variety add to the base price:
 - 20c per 100 cuttings for 500 — 950 cuttings
 - 40c per 100 cuttings for 300 — 450 cuttings
 - 60c per 100 cuttings for 100 — 250 cuttings
 - 50c per 50 cuttings for 50 cuttings
3. If order is received less than 26 weeks prior to desired shipping date add to the above:
 - 10% if order received 18 weeks in advance
 - 15% if order received 12 weeks in advance
 - 20% if order received 6 weeks in advance
 - 30% if order received less than 6 weeks in advance
4. Present volume discounts apply to the above.
5. IF INVOICE FOR MUMS IS NOT PAID WITHIN 28 DAYS 10% WILL BE ADDED TO INVOICE.
6. Example of how to compute prices:
 - September Song, base price \$116.00 per 1000. Ordered in lots of 50 cuttings add 1c per cutting (50c per 50). If ordered 12 weeks prior to shipping date add 15% — new price 14.5c per cutting. Higher price if invoice is not paid in 28 days.

Cuttings shipped F.O.B. Ohio.

In the event that any variety is sold out at shipping time, substitution will be made by our supplier with a suitable variety.

Garden Mums in flower in 3's for Spring Sales

Here is an ever increasing way garden Mums are being offered to bedding plant customers each spring:

A single cutting is potted to a three inch pot Feb. 28, pinched March 7, and grown 60° nights no light, no shade and they'll be nicely in flower by early May! They are a low cost item.

Best of all after your customer has enjoyed the flowers on these plants for a couple of weeks, the plant can be cut back, planted out in the garden and will flower again that fall.

The following is a list of some of the garden Mum varieties that work well grown this way:

WHITE

Ostosa
Chris. Columbus
Jessamine Williams
Joan-Ette

YELLOW

King's Ransom
Peking
Yel. Chris. Columbus
Astoria

PINK

Spellbound
Major Cushion
Ann Ladygo
Purple Waters

BRONZE

Ruby Mound
Dolli-Ette
Lipstick
Cheyenne

Base price on the above varieties, **\$65.00** per 1000. See page 105 on how to compute prices. Prices subject to change without notice. No orders for less than 50 rooted cuttings of a variety accepted.

Varieties: For a more complete list of Garden Mums, see the Ball Mum Guide.

Here is a sample of a garden Mum grown in a 3 in. pot for early May flowering — no light, no shade treatment. Plants like this make fine cash and carry items. Variety pictured, Lipstick. ▶



SWEET SIXTEEN GARDEN MUM COLLECTION

- A collection of 25 rooted cuttings each of 16 varieties carefully selected for you from among the many garden Mum varieties available.

- Sweet Sixteen offers you a collection made up of garden types, cushion Mums, spoon types, daisy and anemone types for a well rounded selection.

- Here are the varieties that make up the Sweet Sixteen Collection:



GARDEN TYPES

(Medium tall, bushy, lots of color)

Ostosa. Excellent white, very free flowering.
Yel. Chris. Columbus. Lemon-yellow decorative.
King's Ransom. Golden-yellow decorative.
Joybringer. Salmon-rose pompon.
Spellbound. Lavender-pink, decorative pompon.
Remembrance. Carmine-red pompon.

CUSHION MUMS

(Compact, "mound" shaped plants)

Corsage Cushion. White cushion.
Major Cushion. Small lavender pompon.
White Cushion. White.

Price of Sweet Sixteen Collection: 400 rooted cuttings **\$47.50**. 4-color labels and poster sent free. Collection available till June 15, F.O.B. Ohio.

- Included with each Sweet Sixteen Garden Mum Collection will be an attractive 14" x 21" four-color garden Mum poster to help you do a bigger selling job and make your sales display more effective.

- In addition to the garden Mum poster with each collection we will send you 25 four-color plant labels for each of the 16 varieties in the collection. Total 400 labels. These attractive labels are 5½" long and show in four colors a picture of each variety in the collection.

Minnpink. Rose-pink cushion.

Lipstick. Ruby-orange.

Ruby Mound. Red cushion.

SPOON TYPES

(Tubular petals opening at tips to form a spoon)

Jessamine Williams. Early free flowering white.

Dolli-Ette. Showy, golden bronze.

DAISY and ANEMONE TYPES

(Short compact free flowering plants)

Mischief. Dark purple with yellow center.

Ann Ladygo. Medium pink anemone.

State shipping date desired. In the event that any variety is sold out at shipping time, substitution will be made by our supplier with a variety of the same color and type.

NOTE: especially in late orders, it may be necessary to substitute on several varieties in this collection. Unfortunately due to the high cost of 4-color labels we cannot supply labels for substituted varieties.

E-FLOWMATIC Pot Watering System

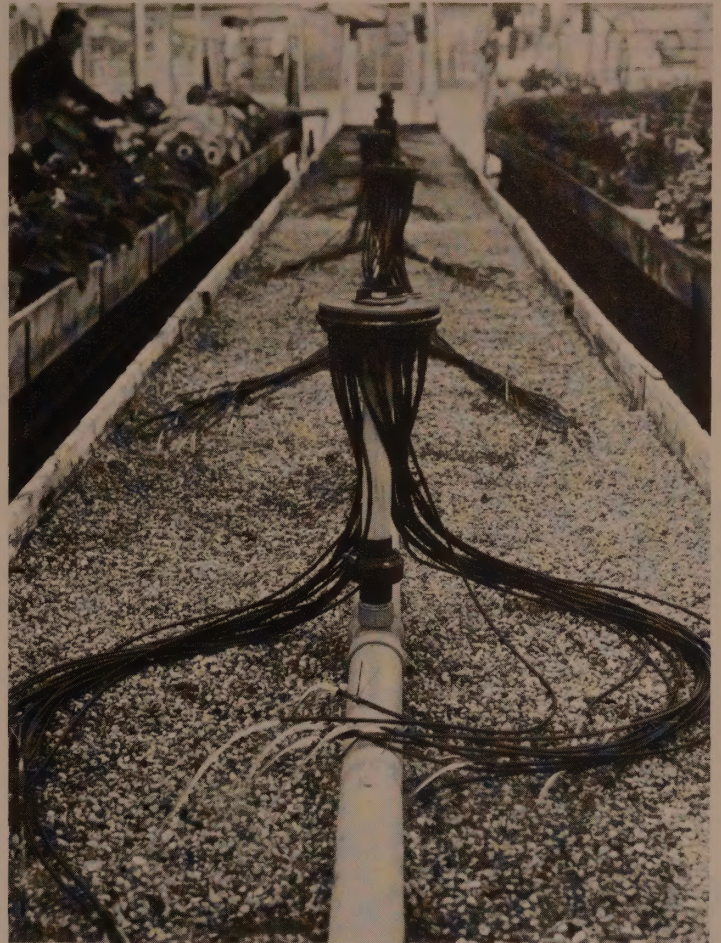
This device will save you hundreds of dollars and many hours of slow, tiresome hand watering. A simple turn of a valve waters several hundred pots simultaneously in two to three minutes.

Pay for itself? Yes, it does! The average greenhouse can recover the full cost of the system in labor savings alone in less than 2 years, plus the added advantage of better quality plants. Watering can be done in late afternoon, thus allowing plants to have moisture available during the night, when they need it most to grow their best. The speed of watering pot plants allows better utilization of labor—E-FLOWMATIC has allowed one firm to have only ONE MAN watering their 150,000 sq. ft. of pot plants, all by his lonesome.

Ideal for such pot grown crops as Hydrangeas, Mums, Poinsettias, Lilies, and especially invaluable for the application of water to Gloxinias and African Violets where foliage must be kept dry. Quality of these and other plants is improved when E-FLOWMATIC applies the water, as it goes on more slowly and saturates each individual pot more thoroughly than hand watering, which just splashes it in the pot. There is very little, if any, soil compaction, thus assuring good root aeration. Plants can be watered at any time of day, or in any kind of weather, without wetting the foliage. Liquid fertilizer can be applied easily thru the system by the feeder unit.

Write for prices and detailed information describing E-FLOWMATIC, or better still, send us the dimensions of your benches (exact inside length and width), maximum number of pots at any one time per bench. A quotation will be forwarded to you. A bench 100 ft. long, 4 ft. wide, with 500 pots maximum, costs less than \$200.00, f.o.b. Texas.

“Man — this E-Flowmatic sure saves a lot of time; up to 5 hours per day,” says Mr. Gerrit Christians (right), who has 6000 pots of Mums watered by E-Flowmatic. Mr. Christians goes on to say very emphatically that purchase of the system is one of the finest investments he has ever made. He further states that on a Saturday in July, he finished watering his 6000 pots in 30 minutes, a chore which normally took 5 to 6 hours before the advent of E-Flowmatic. Mr. Harold Christians (left) is equally enthused.



E-Flowmatic is easily installed, just a matter of minutes to install a 100 ft. bench. Each header unit waters 32 pots — thoroughly — rapidly — uniformly. Simple adjustment of the header allows various size pots to be watered from one system.

It's a labor saver!



DUPONT'S WEATHERABLE **MYLAR**®

OVER 6,000,000 SQUARE FEET NOW IN USE IN THE U.S. AND CANADA

The most durable glazing film available today. The film that will help you cut your costs in building, operating and maintaining your greenhouses.

• STRONG

DuPont's Weatherable Mylar Polyester film W has a tensile strength of 20,000 P.S.I. Mylar is **nine times stronger than Polyethylene** and is one-third the strength of machine steel. Highly resistant to tearing. Try to tear one of our free samples!

• LONG-LASTING

Weatherable Mylar has been dramatically improved by DuPont to last **four to seven years**. Four-year life applies to roof surfaces and seven-year life applies to vertical surfaces, when

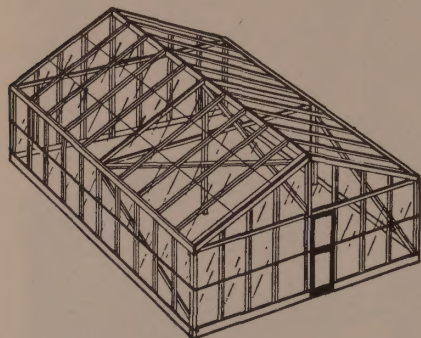
properly applied. Withstands temperature extremes. Mylar keeps its high strength and good appearance from **60° below zero to 200° above zero**.

• CLEAR

Nationwide tests have shown that the light transmission of Weatherable Mylar is essentially the same as glass. **Mylar will not turn cloudy or discolor with age**. Plant growth under Mylar has been proven to equal or surpass plant growth under glass.

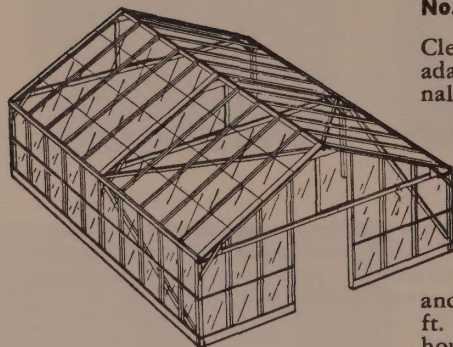
• Crop production equal to and better than under glass.

STRUCTURES DESIGNED TO BE COVERED WITH WEATHERABLE MYLAR (write for free plans):



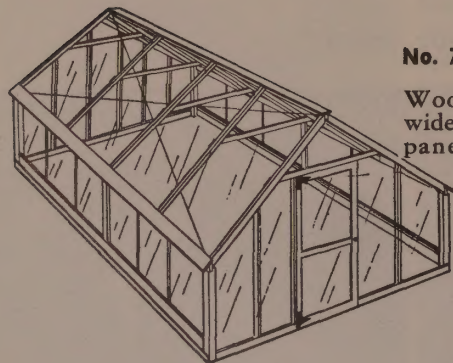
No. 48

Simple wood frame 21 ft. 6 in. wide with one center post, built from lumber available locally. Cost of material (lumber, Mylar and fans) for 4000 sq. ft. house is 48c per sq. ft.



No. 58 — 30

Clear span 30 ft. wide adaptation of the original No. 58 house. Ideally suited for cut flower crops. The 30 ft. span allows for a 5, four ft. wide bench arrangement with 18 in. walks. Cost of lumber, Mylar and fans is 57c per sq. ft. for a 3000 sq. ft. house.



No. 78

Wood structure 11 ft. wide covered with Handipanel. Small structure ideal for starting vegetables in early spring.

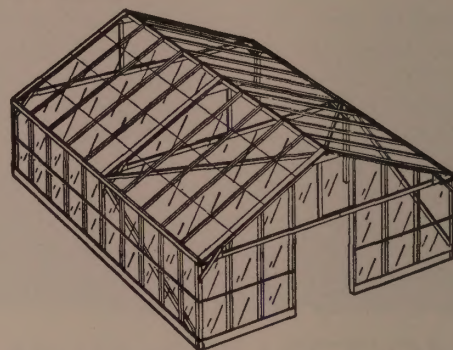
TROX HOUSE

Complete pre-fabricated structure shipped from Battle Creek, Mich.

Simple to erect, ideal single house for Garden Center or year round growing.

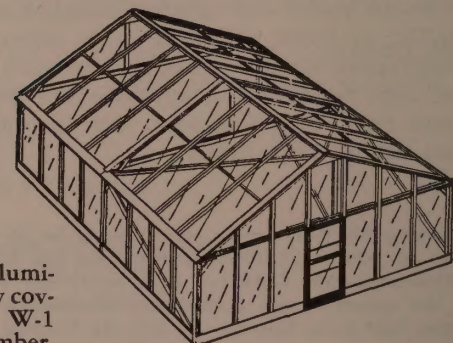
No. 58 — 24

Clear span 24 ft. wide house built from lumber available locally. Ideal house for covering large areas. Same cost as No. 48.



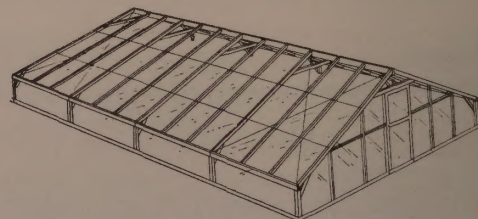
No. 68

Clear span 24 ft. wide, identical to No. 58 house, but adapted to be covered with pre-fabricated Handipanel—our new aluminum frames, factory covered with 5 mil W-1 Mylar. Cost of lumber, Handipanel and fans for 4000 sq. ft. house is \$1.00 per sq. ft.



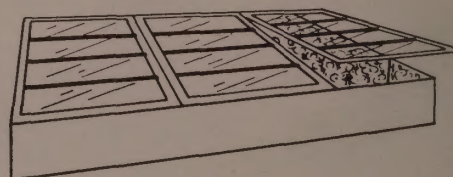
No. 88

20 ft. wide clear span bedding plant house. Can also be used for storing Hydrangeas and Azaleas. Sufficient head room for 2 cut flower beds 4 ft. wide near center of house. Lumber and Mylar cost for 1000 sq. ft. house is 42½c per sq. ft.

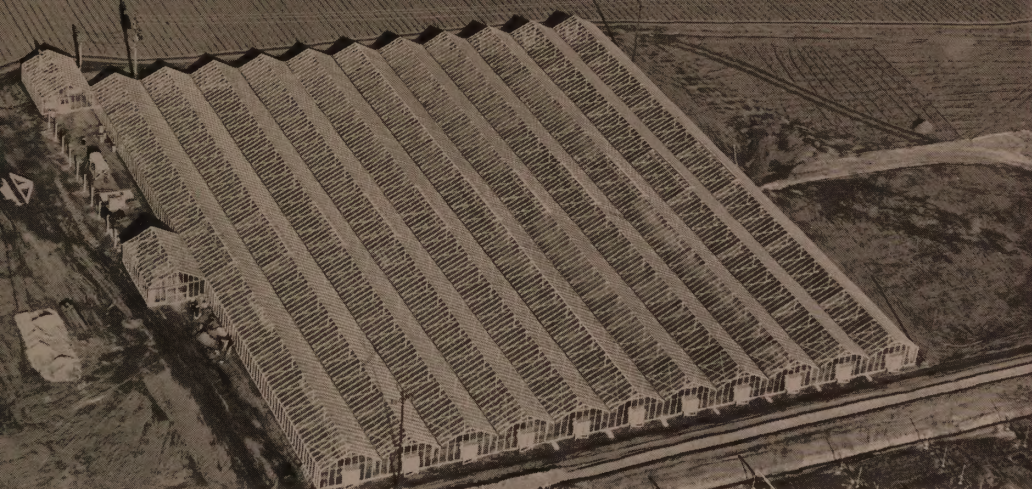


COLD FRAMES

Cover with Mylar in wood frames or with Handipanel. Mylar is ideal for recovering old leaky houses, and also for use in interior partitions.



Write for free Plastic Greenhouse Information Kit containing plans, prices and instruction booklet "ALL ABOUT MYLAR."



Aerial view of the 65,000 sq. ft. Mylar range at the Salinas, California, plant of Yoder Bros., prominent Mum propagators.

PRICES OF MYLAR*

5 Mil W-1

Designed for one side exposure to the sun — recommended for greenhouse glazing.

ROLL SPECIFICATIONS

Width	50 ft. Roll Wt. per Roll	Sq. Ft. Per Roll	100 ft. Roll Wt. per Roll	Sq. Ft. Per Roll	510 ft. Roll Wt. per Roll	Sq. Ft. Per Roll	1025 ft. Roll Wt. per Roll	Sq. Ft. Per Roll	PRICES PER SQUARE FT.	50 & 100 ft. rolls	510 & 1025 ft. rolls
42 in.	8 lbs.	175	15 lbs.	350	75 lbs.	1735	135 lbs.	3587	175-2999 sq. ft.	\$0.15	\$0.14
48 in.	9 lbs.	200	17 lbs.	400	85 lbs.	2040	155 lbs.	4100	3000-23,999 sq. ft.	.14	.13½
51 in.	10 lbs.	212	18 lbs.	425	95 lbs.	2167	165 lbs.	4356	24,000 sq. ft. and up	.13½	.13

F.O.B. West Chicago, Ill.

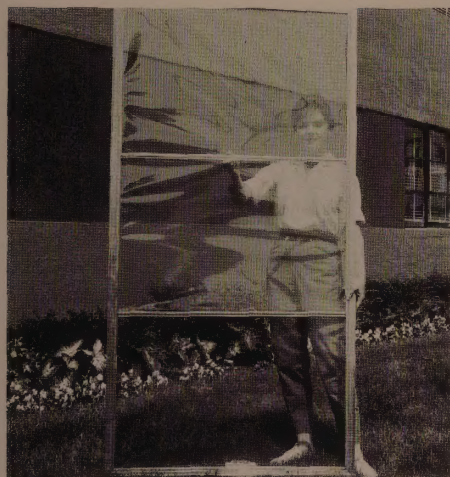
5 Mil W-2

Designed for exposure to sun on either side — recommended for cold frames and other reversible type structures.

ROLL SPECIFICATIONS

Width	50 ft. Roll Wt. per Roll	Sq. Ft. Per Roll	100 ft. Roll Wt. per Roll	Sq. Ft. Per Roll	510 ft. Roll Wt. per Roll	Sq. Ft. Per Roll	1025 ft. Roll Wt. per Roll	Sq. Ft. Per Roll	PRICES PER SQUARE FT.	50 & 100 ft. rolls	510 & 1025 ft. rolls
36 in.	7 lbs.	150	13 lbs.	300	65 lbs.	1530	117 lbs.	3075	150-2999 sq. ft.	\$0.17	\$0.16½
42 in.	8 lbs.	175	15 lbs.	350	75 lbs.	1735	135 lbs.	3587	3000-23,999 sq. ft.	.16½	.16
48 in.	9 lbs.	200	17 lbs.	400	85 lbs.	2040	155 lbs.	4100	24,000 sq. ft. and up	.16	.15½

F.O.B. West Chicago, Ill.



NEW IMPROVED HANDIPANELS

Aluminum frames glazed with 5 mil W-1 Mylar. 39 1/8 x 78 in. Use of improved vinyl spline now makes it possible for grower to reglaze his panels. Packed 6 and 12 per carton. Sold in multiples of 6 panels only. 2% cash or ten days, net 30 days, F.O.B. West Chicago, Ill.

In Lots of	Each
6 panels	\$9.15
12 to 138 panels	9.00
144 to 592 panels	8.60
600 or more panels	8.20

BALL HANDIPANEL

ANGIERS DOUBLE FACE ADHESIVE (No. PT5502). Suitable for patching Mylar, Polyethylene, and other plastic films. 1 roll, 1 inch x 72 yards, \$3.60 per roll. Prepaid.

DuPONT ADHESIVE (No. 46960). An adhesive cement used for sealing seams or laps of Mylar that appear to be loose. 1 pint, \$2.00; 1 qt., \$3.75. F.O.B. West Chicago, Ill.

TROX HOUSE

Size of House	TROX WOOD FRAME		MYLAR	
	Wt.	Price	48 in. Wt.	5 Mil W-1 Price
23 ft. x 24 ft.	435 lbs.	\$231.39	51 lbs.	\$180.00
23 ft. x 32 ft.	580 lbs.	273.93	68 lbs.	240.00
23 ft. x 40 ft.	725 lbs.	343.18	85 lbs.	300.00
23 ft. x 48 ft.	870 lbs.	397.00	102 lbs.	360.00
23 ft. x 64 ft.	1142 lbs.	532.00	119 lbs.	420.00
30 ft. x 48 ft.	942 lbs.	517.95	120 lbs.	420.00
30 ft. x 64 ft.	1246 lbs.	693.84	150 lbs.	490.00

Also available in above widths from 80 ft. to 176 ft. lengths. Write for prices. F.O.B. points: Trox wood frame, f.o.b. Battle Creek, Mich. Mylar, f.o.b. West Chicago.

STAINLESS STEEL CLIP FOR MYLAR

3/8 in. wide and 2 1/4 in. long. Designed to hold together 2 in. lap of Mylar in lengthways application of Mylar to a greenhouse. Generally only one clip is required on each 2 in. lap between rafters. Prices 2% cash or ten days, net 30 days, f.o.b. West Chicago, Illinois.

	Per 100
100 to 900	\$8.00
1000 to 4900	7.50
5000 or more	7.00

*Du Pont's registered trademark for its polyester film.





Low Cost Polyethylene

for greenhouse covering...

COLD FRAMES... INSULATING INSIDE OF GREENHOUSES (known to reduce heating cost by 30%)... **TEMPORARY GREENHOUSE PARTITIONS... MULCHING... GREENHOUSE BENCH & SOIL COVER... CHEMICAL FUMIGATION COVERS.**

Polyethylene is the accepted low cost plastic covering for temporary greenhouse space. In addition it has a wide variety of other uses as noted above. It is available in wide sheets for ease of application to a greenhouse frame. Polyethylene is almost

transparent, although slightly milky in appearance. All widths are seamless.

Most sizes listed below are available in both clear and black Polyethylene. In ordering, be sure to state gauge (thickness), width, and color you want.

POLYETHYLENE PRICES — CLEAR OR BLACK

Gauge	Width	Length	Shipping Weight	Per Roll	5 or more rolls Per Roll
*.002	9 ft. x 100 ft.		10 lbs.	\$ 4.40	\$ 4.15
*.002	16 ft. x 100 ft.		18 lbs.	7.20	6.70
*.004	3 ft. x 100 ft.		8 lbs.	2.70	2.50
.004	6 ft. x 100 ft.		13 lbs.	5.40	5.05
*.004	8 ft. x 100 ft.		18 lbs.	7.20	6.70
.004	10 ft. x 100 ft.		24 lbs.	9.00	8.40
.004	12 ft. x 100 ft.		26 lbs.	10.80	10.10
.004	14 ft. x 100 ft.		31 lbs.	12.60	11.75
.004	16 ft. x 100 ft.		36 lbs.	14.40	13.45
.004	20 ft. x 100 ft.		43 lbs.	18.00	16.80
.004	24 ft. x 100 ft.		51 lbs.	21.60	20.15
.004	28 ft. x 100 ft.		59 lbs.	25.20	23.50
.004	32 ft. x 100 ft.		67 lbs.	28.80	26.90
*.006	3 ft. x 100 ft.		11 lbs.	4.05	3.80
.006	6 ft. x 100 ft.		21 lbs.	8.10	7.56

Gauge	Width	Length	Shipping Weight	Per Roll	5 or more rolls Per Roll
.006	10 ft. x 100 ft.		34 lbs.	\$13.50	\$12.60
.006	12 ft. x 100 ft.		39 lbs.	16.20	15.10
.006	14 ft. x 100 ft.		45 lbs.	18.90	17.65
.006	16 ft. x 100 ft.		53 lbs.	21.60	20.15
.006	20 ft. x 100 ft.		63 lbs.	27.00	25.20
.006	24 ft. x 100 ft.		74 lbs.	32.40	30.25
.006	28 ft. x 100 ft.		86 lbs.	37.80	35.30
.006	32 ft. x 100 ft.		98 lbs.	43.20	40.30
** .0015	3 ft. x 1000 ft.		25 lbs.	10.15	9.45

*Available only in clear Polyethylene.

**Available only in black.

Shipments of 500 lbs. or over prepaid within Continental U.S., excluding Alaska and Hawaii; otherwise f.o.b. West Chicago.

SAMPLES AVAILABLE UPON REQUEST

GREENHOUSE PRODUCTION SUPPLIES



BLACK SHADE CLOTH

BLACK CLOTH (For Day Length Control on Mums, etc.) Available **UNSEWED** in 3 ft. widths, cut to any length. May be ordered **SEWED** to widths in multiples of 1½ ft. such as 9 ft., 10½ ft., 12 ft., 13½ ft., 15 ft., etc.

	Price per Sq. Yard
	Sewed
American Black Sheen	\$0.62
Knights Black Sheen. Heavier and more opaque; best for off season	.67
	.64

On orders for less than minimum of 100 sq. yds. sewed or 300 sq. yds. unsewed, a charge of \$2.00 is added. F.O.B. New Jersey.

PLANTNET BENCH FABRIC For Cut Flower Beds

STOP HAND STRINGING AND TYING, SAVE TIME, LABOR AND MONEY.

This plastic netting can be installed in a few minutes — eliminates costly hand stringing and tying — heavy pipe supports not needed — very durable — will not rust or tear shade cloth.

Successfully used on Mums, Carnations, Iris, Roses, Snaps.

Light weight, shipped parcel post. F.O.B. New York. Sold in 200 ft. lengths only.

36 in. width — 6 mesh across, 200 ft. long	\$12.85
42 in. width — 7 mesh across, 200 ft. long	14.00
48 in. width — 8 mesh across, 200 ft. long	15.25
54 in. width — 9 mesh across, 200 ft. long	16.80
60 in. width — 10 mesh across, 200 ft. long	18.20



VISQUEEN Ultra Violet Resistant Polyethylene

A Specially Developed Longer-Life Polyethylene Film for Greenhouses

Sunlight resistant, this film can be expected to last at least twice as long as ordinary films when properly applied. F.O.B. West Chicago.

2 Mil Film	Single Roll	5 Rolls or more, each	4 Mil Film	Single Roll	5 Rolls or more, each
12 ft. x 800 ft.	\$62.20	\$58.05	3 ft. x 100 ft.	3.90	3.65
13 ½ ft. x 800 ft.	70.00	65.30	8 ft. x 100 ft.	10.35	9.65
			10 ft. x 100 ft.	12.95	12.10
			12 ft. x 100 ft.	15.55	14.50
			14 ft. x 100 ft.	18.15	16.95

GRO-HOSE AUTOMATIC BENCH WATERER

Gro-Hose does a more thorough job of watering than by hand. This black polyethylene hose, 2¼ in. wide, has 4 holes spaced 8 in. apart, allowing the entire bench to be watered **AUTOMATICALLY**.

Easy to install — saves labor — operates on 1 lb. pressure — keeps foliage dry.

GRO-HOSE TUBING

50 to 1000 ft.	9½¢ per ft.
1000 ft. to 5000 ft.	8½¢ per ft.
Over 5000 ft.	7½¢ per ft.
Reel of 500 ft. (without couplings)	\$35.00

GRO-HOSE HEADERS

Two-Way	\$3.50 each
Four-Way	4.25 each

Prices F.O.B. N.Y.

(2000 ft. or more prepaid).

Non-perforated hose available — Same size and price as above.



KRIEGER SOIL SCREENER

Prepare Your Soil Properly For Better Plant Growth

SPECIFICATIONS

Capacity: About 60 bushels an hour.

Over-All Size: 60 in. long, 24 in. wide, 45 in. high.

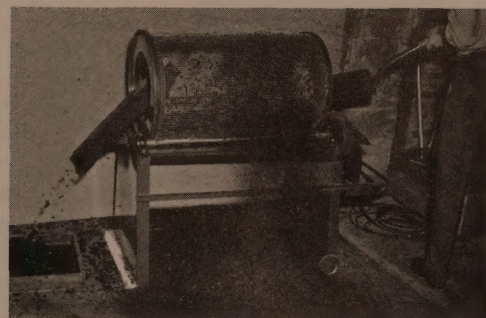
Construction: Frame heavy steel plate, galvanized mesh drum lifts off for easy moving. metal chute channels out trash, stones. Ball bearings. Driven by ¼ H.P., 110 volt motor.

PRICES

Without Motor\$135.00

With ¼ H.P. Motor 175.00

Shipping weight about 100 lbs.
F.O.B. Jefferson, Iowa.



Does a better, faster and easier job of screening than old-fashioned hand methods. Light in weight for easy moving. Durably built.

LINDIG SOIL SHREDDERS — A Size and Model for Every Job

Designed to give fast, thorough, and complete shredding of soil, manure, peat, compost, etc. Equipped with free-swinging ACTIONIZED SHREDDING BLADES OF ALLOY STEEL, mounted on heavy steel rotors, specially designed to allow passage of non-crushable objects without damaging blades. The body and hopper are fabricated of heavy gauge sheet steel. The discharge door is adjustable and can be regulated to control the flow of material as it leaves the shredder. All models have semi-pneumatic, rubber-tired wheels.

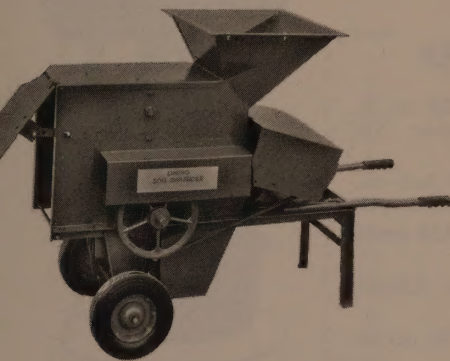
SPECIFICATIONS

MODELS	JR-B	1 B-4	1 B-6	2 B-6	2 B-8	3 B-9
Height	29"	36"	36"	36"	36"	40"
Length	38"	46"	46"	46"	46"	48"
Width at wheels	15"	18 ½"	18 ½"	20 ½"	20 ½"	28"
Feeding Hopper	15 ½"x14"	16"x18"	16"x18"	18"x20"	18"x20"	18"x22"
Rotor Width	7"	8 ½"	8 ½"	10 ½"	10 ½"	15"
No. of Shredding Hammers	15	16	24	24	32	36
No. of Upper Pivoting Blades	4	3	5	5	7	8
Capacity per hr.	3 yds.	8 yds.	8 yds.	14 yds.	14 yds.	20 yds.
Wt., less power	90 lbs.	155 lbs.	165 lbs.	170 lbs.	180 lbs.	325 lbs.

PRICES:

	JR-B	1 B-4	1 B-6	2 B-6	2 B-8	3 B-9
Less Power with pulleys and belt	\$120.00	\$167.50	\$177.50	\$192.50	\$202.50	\$355.00
With ½ H.P. Electric Motor, 1 phase	170.00	—	—	—	—	—
With ¾ H.P. Electric Motor, 1 phase	—	250.00	260.00	275.00	—	—
With 1 H.P. Electric Motor, 1 phase	—	—	—	295.00	305.00	—
With 1 ½ H.P. Electric Motor, 1 phase	—	—	—	355.00	365.00	—
With 1 ½ H.P. Electric Motor, 3 phase	—	—	—	320.00	330.00	—
With 2 H.P. Electric Motor, 3 phase	—	—	—	—	—	465.00
With 2 H.P. Electric Motor, 1 phase	—	—	—	—	—	520.00
With 3 H.P. Electric Motor, 3 phase	—	—	—	—	—	485.00
With 3 H.P. Electric Motor, 1 phase	—	—	—	—	—	570.00
With 2 H.P. Gas Engine and Clutch	172.50	—	—	—	—	—
With 3 ¼ H.P. Gas Engine and Clutch	—	232.50	242.50	257.50	267.50	—
With 5 ¼ H.P. Gas Engine and Clutch	—	—	—	—	—	465.00
Screening Attachment, complete	—	62.00	62.00	72.00	72.00	165.00
Extra Screen Inserts	—	4.00	4.00	5.00	5.00	7.50

Prices are F.O.B. Factory, St. Paul, Minnesota, and subject to change. Prices in effect at time of shipment will apply. SEND FOR DETAILED CIRCULAR.



STEAM-FLO SOIL STERILIZER

Here's a machine that will sterilize a bed 5 x 50 ft. in 2 hours — maintaining from 8 to 10 lbs. pressure, burning from 4 to 4½ gallons of No. 1 fuel oil per hour AND you do not have to handle the soil.

Completely equipped including automatic water feed and low water cut off. Not including tires (uses 16 in. rim tires). Price: **\$685.00.**

25 ft. Steam Hose 1 ¼ in. with two female connectors. Price: **\$41.00.**

Aluminum tubing 1.9 in. outside diameter, flanged and drilled in 10 ft. lengths. Price: **45c** per ft.

Weston Thermometer, for soil heat testing, 2 in. head — 8 in. stem: Price: **\$9.00** each. F.O.B. Cincinnati, Ohio

Steam-Flo Soil Sterilizer. 15 H.P.



Capable of steaming 250 sq. ft. of bench area in 2-3 hours.

CANVAS STEAM HOSE

This canvas hose conducts the steam on the bench being sterilized. Use one or two hoses per bed, depending on the width (two hoses should be used on beds 4 ft. or wider). This porous canvas hose

is 5 inches in diameter and available in any length. Good steam hose is essential for a good sterilizing job.

Price per Lineal foot (one piece): Up to 150 ft., **18½c** per ft.; 150 - 300 ft., **19½c** per ft.; 300 - 500 ft., **20½c** per ft.; 500 - 1,000 ft., **21½c** per ft. F.O.B. Richmond, Ind.



VINYL FUMI-COVERS for Steam Sterilizing

Temperature range 10° to 280° F. Ideal for steam sterilizing.

3 gauge. Clear or black (specify which).

8 Gauge. Chlorophyl green.

Life expectancy of 8 gauge is 3 times that of 3 gauge.

Prices, F.O.B. Chicago, Ill.

3 GAUGE		
Width	Length	
6 ½ ft.	100 ft.	\$20.80
8 ft.	100 ft.	25.60
10 ft.	100 ft.	32.00
12 ft.	100 ft.	38.40

150 ft.
Length
6 ½ ft.
8 ft.
10 ft.
12 ft.

8 GAUGE		
Width	Length	
6 ½ ft.	100 ft.	\$38.35
8 ft.	100 ft.	47.20
10 ft.	100 ft.	59.45
12 ft.	100 ft.	69.60

Supplementary Heat for Plastic or Glass Houses

HY-LO Heaters, the quality low cost portable heater for supplementary heat when the temperatures sink to

extreme lows and for emergencies when your power, fuel or heating plant fails.



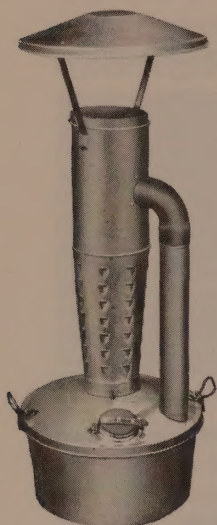
Illustration shows the Standard HY-LO in use in a glass house of mixed Carnations, Snapdragons and bedding plants.



Shown is the Junior HY-LO as extensively used in Florida and the southern states in plastic covered structures for the production of green plants, mums, etc.



HY-LO Heaters for Poly or Mylar bedding plant houses in the spring.



HY-LO JUNIOR SALAMANDER

Over-all height, including diffusion hood, 53¾ in. Net weight, 27½ lbs. Shipping weight, 28¾ lbs.

Fuel capacity, B.T.U. output and burning rate same as Standard Model.

1 to 24 units, **\$23.50** each; 25 or more, **\$22.50** each.

F.O.B. West Chicago, Ill.; Allentown, Pa.; Chase, Ala.; Upland, Calif.

HY-LO STANDARD SALAMANDER

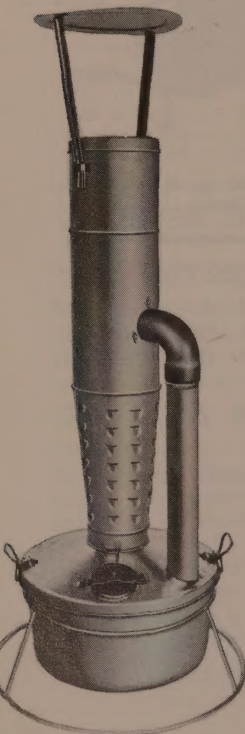
Over-all height, including diffusion hood, 62¾ in. Net weight 26¾ lbs.; Shipping weight, 28½ lbs.

Capacity, 10 gallons kerosene, No. 1 furnace oil, or diesel fuel. Heat output up to 140,000 B.T.U. per hour, depending on burning rate of ½ to 1 gallon per hour.

Photo shows Salamander Stand (extra).

1 to 24 units, **\$22.50** each; 25 or more units, **\$21.50** each.

F.O.B. West Chicago, Ill.; Allentown, Pa.; Chase, Ala.; Upland, Calif.



ACCESSORIES AVAILABLE

Salamander Stand. Eliminates possibility of the heater being tipped over. Play safe, always use a heater stand. **\$3.50** each.

Stove Pipe Adapter. Unit fits top of stack to take standard 6 in. stove pipe. For use where venting to outside of structure is desired. **\$1.25** each.

HY-LO FORCED AIR HEATER

Performance: 70,000 to 125,000 B.T.U. at 600 cu. ft. per minute. 43½ in. high, 24 in. diameter. Net weight, 35 lbs. Shipping weight, 36½ lbs.

Fuel capacity, 10 gallons No. 1 or No. 2 fuel oil. 1/12 H.P. motor (4.1 amps.), 115 volt-60 cycle, A.C. 1 to 24 units, **\$52.50** each; 25 or more, **\$49.50** each. (Stand not included).

F.O.B. West Chicago, Ill.; Allentown, Pa.; Chase, Ala.; Upland, Calif.

Photo shows Salamander stand — refer to accessories below.

Forced Air Blower Conversion Unit. Converts either Standard or Junior Models to forced air type. Shipping weight, 13 lbs.

1 to 24 units, **\$31.50** each; 25 or more, **\$29.50** each. F.O.B. West Chicago, Ill. only.



HY-LO L.P. GAS HEATER

Burns L.P. or natural gas. Rated at 85,000 B.T.U. per hour. Can be supplied with either a manually controlled valve or safety pilot and shut-off valve. Working parts are Underwriter approved, and simple conversion adapts heater for city gas.

Manual Control Model includes shut-off valve, L.P. Regulator and 7 ft. hose. Above right. Height, 24½ in. Shipping weight, 21 lbs.

1 to 24 units, **\$30.50** each; 25 or more, **\$29.50** each.

Safety Control Model includes Safety Pilot and Shut-off valve, L.P. Regulator and 7 ft. hose. Shipping weight, 22½ lbs. Below right.

1 to 24 units, **\$39.50** each; 25 or more, **\$37.50** each.

F.O.B. West Chicago, Ill.; Allentown, Pa.; Chase, Ala.; Upland, Calif.



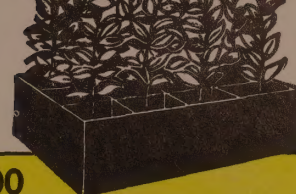
Lighting Torch. 6 quart capacity. A time-saver where a number of heaters are lighted daily. **\$10.00** each.

Replacement parts for all heaters are available at a nominal cost. Write for prices, giving part names and code letters.

All accessories and replacement parts F.O.B. West Chicago, Ill. only.

Additional Literature on Request.

Bird's Vita-Bands and Pots



VITA-BANDS

Nutrient-treated Vita-Bands, of a fibre resin construction, enable seedlings and cuttings to make rapid growth especially in the early stages. They retain moisture and cut your watering time. Three types of Vita-Bands are available:

VITA-BAND 10 for growing periods of 8-10 weeks.

VITA-BAND D disintegrates in the soil when transplanted — no need to remove band.

VITA-BAND H for extra long growing periods.

TOM THUMB FLATS

Designed to hold 1 dozen Vita-Bands. Size No. 1 holds 12 1 3/4 x 2 1/2 in. bands. Size No. 2 holds 12 2 x 2 1/2 in. bands.

PRICE PER 1000

	Size No. 1	Size No. 2
Pack per case	\$44.70	\$49.60
Wt. per case	250 lbs.	62 lbs.

PRICES PER 1000

	1 3/4 x 1 3/4 x 2 1/2	2 x 2 x 2 1/2	2 x 2 x 3	2 1/2 x 2 1/2 x 3	3 x 3 x 3	4 x 4 x 3	4 x 4 x 4
Vita-Band 10							
0-8,000	\$5.40	\$5.65	\$6.20	\$6.70	\$7.45	—	\$12.00
10,000-24,000	5.25	5.50	6.05	6.55	7.25	—	11.80
26,000-48,000	5.10	5.35	5.90	6.40	7.10	—	11.60
50,000-200,000	5.00	5.25	5.70	6.25	6.90	—	11.25
Pack per case	2000	2000	2000	2000	1000	—	500
Wt. per case	36 lbs.	41 lbs.	49 lbs.	61 lbs.	36 lbs.	—	32 lbs.
Vita-Band D							
0-8,000	\$5.55	\$5.80	\$6.30	\$6.75	\$7.60	\$ 9.90	\$12.40
10,000-24,000	5.40	5.60	6.35	6.60	7.40	9.70	12.20
26,000-48,000	5.25	5.45	6.20	6.45	7.20	9.50	11.95
50,000-200,000	5.15	5.35	6.05	6.30	7.05	9.35	11.60
Pack per case	2000	2000	2000	2000	2000	1000	1000
Wt. per case	21 lbs.	23 lbs.	28 lbs.	34 lbs.	40 lbs.	27 lbs.	35 lbs.
Vita-Band H							
0-8,000	\$6.55	\$6.95	\$8.15	\$8.70	\$9.15	\$11.25	\$13.75
10,000-24,000	6.40	6.75	7.95	8.50	8.90	11.00	13.55
26,000-48,000	6.25	6.60	7.70	8.30	8.70	10.70	13.35
50,000-200,000	6.10	6.45	7.55	8.10	8.50	10.45	12.90
Pack per case	1000	1000	1000	1000	1000	500	500
Wt. per case	26 lbs.	30 lbs.	35 lbs.	42 lbs.	50 lbs.	34 lbs.	45 lbs.

MENNE-POTS Popular Low-Cost Perennial Pots

This pot can withstand rough handling, does not heat, and is economically priced. A size and weight for any plant, shrub, or flower.

REGULAR WEIGHT

Size	Height	Top. Diam.	Bottom Diam.	Wt. per 100	Pak Per Carton	Per Case	Per 1000
0	4 in.	4 in.	3 1/2 in.	10 lbs.	250	\$6.88	\$ 25.00
0 1/2	5 in.	5 in.	4 in.	12 1/2 lbs.	200	7.00	32.50
1	6 in.	5 in.	5 in.	15 lbs.	100	4.00	37.50
2	9 in.	5 3/4 in.	7 in.	24 lbs.	100	4.50	42.50
3	9 in.	8 1/2 in.	6 1/2 in.	30 lbs.	100	5.00	47.50
Pan	5 in.	8 1/2 in.	7 1/2 in.	30 lbs.	100	5.00	47.50

HEAVY WEIGHT

Size	Height	Top. Diam.	Bottom Diam.	Wt. per 100	Pak Per Carton	Per Case	Per 1000
0	4 in.	4 in.	3 1/2 in.	25 lbs.	250	\$9.38	\$ 35.00
0 1/2	5 in.	5 in.	4 in.	30 lbs.	100	4.50	42.50
1	6 in.	6 in.	5 in.	35 lbs.	100	5.25	50.00
2	9 in.	7 in.	5 3/4 in.	55 lbs.	50	3.13	60.00
3	9 in.	8 1/2 in.	6 1/2 in.	70 lbs.	50	3.38	65.00
Pan	5 in.	8 1/2 in.	7 1/2 in.	70 lbs.	100	6.25	60.00
							Per 500
4	10 in.	10 in.	8 1/2 in.	120 lbs.	50	5.50	52.50
5	12 in.	12 in.	10 in.	220 lbs.	20	6.00	125.00

F.O.B. New York. 500 and up at 1000 price. Minimum order 1 case. Sold only in case lots. Not mailable.



VITA-POTS and RED POTS — write for prices

BIRD PERENNIAL POTS

A better perennial pot for Roses, vines, shrubs and other perennials. Made of a tough material with hard, smooth coating inside and out. Solid stapled bottom with openings for drainage.

5 inch high pot for use as a Mum pan.

5 1/2 inch high pot designed for small perennials and bulbs.

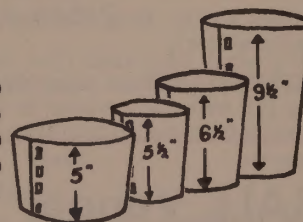
6 1/2 inch high pot designed for larger perennials, junior Roses and vines.

9 1/2 inch high pot designed for larger Roses, larger perennials such as Peonies, large vines and shrubs.

NOTE: Order by height — not top diameter.

Height	Top Dia.	Wt. per 1000	Per Case of 200	Per 1000
5 in.	8 in.	325 lbs.	\$13.70	\$65.00
5 1/2 in.	5 in.	165 lbs.	10.00	47.50
6 1/2 in.	6 in.	220 lbs.	12.30	58.50
9 1/2 in.	7 in.	355 lbs.	14.50	69.00

Minimum order, case of 200 of one size.
3 cases at 1000 price.



NOTE: Bird Vita-Bands, Tom Thumb Flats, Perennial Pots, Vita-Pots and Red Pots are shipped either F.O.B. West Chicago, Ill. or East Walpole, Mass. **SOLD IN CASE LOTS ONLY.**
Write for Prices on Larger Quantities.

MORTON SOIL DRENCH — F.O.B. West Chicago, Ill.

A new broad-spectrum fungicide for the control of most fungal disease pests. Used as a soil drench for the treatment of flowers, vegetables, tree seedlings, and as a dip for bulbs and transplants.

For vegetables, use Morton Soil Drench only as a pre-emergence soil drench and only when seedlings are to be transplanted later to untreated soil. For non-food crops or plants, it can be applied

to soil just prior to or after seeding or transplanting, or to plants at any stage of growth.

Morton Soil Drench is diluted with water at the rate of 1 fluid ounce per 35 gallons of water. (1 gallon makes 4500 gallons of solution.)

1 gallon bottle, **\$15.95**; 5 gallon drum, **\$74.75**



BALL Better PLANT BANDS and PLANTRAYS

for Bedding Plants...
Carnations... Vegetables
Chrysanthemums...
Nursery Stock... Perennials

It's been nearly 30 years since Ball Veneer Plant Bands started the trend away from clay pots for the production of bedding plants and growing-on stock. Despite today's use of many other types of individual containers, millions of these popular Ball Bands are still bought. Here's why:

- Low in cost
- Clean and disease free
- Hold more soil than round pots
- Fit close — no waste space
- Lighter to handle and store

- Need less water than clay pots
- Made of long-fibered Basswood
- Treated to inhibit mold and fungus
- Fastened with rust-resistant staples
- Kiln-dried to reduce shipping weight

You simply can't beat Ball Veneer Bands for low delivered cost, and high quality results. If you're tired of bands that splinter and crack — and are hard to open, order these superior Ball Better Bands and see the difference.

Various sizes of Plant Bands may be combined to obtain quantity price.

PRICES PER 1000 IN QUANTITIES AS SHOWN BELOW

SIZE	Shipping Units of	Weight per 1000	0- 9,000	10,000 24,000	25,000 49,000	50,000 Up
1 3/4 x 1 3/4 x 2 1/2	2000	18 lbs.	\$ 6.35	\$ 6.05	\$ 5.95	\$ 5.70
2 x 2 x 2	2000	19 lbs.	6.35	6.05	5.95	5.70
2 x 2 x 2 1/2	2000	20 lbs.	6.45	6.15	6.05	5.80
2 x 2 x 3	2000	21 lbs.	6.95	6.60	6.45	6.20
2 1/2 x 2 1/2 x 2 1/2	2000	22 lbs.	6.95	6.60	6.45	6.20
2 1/2 x 2 1/2 x 3	2000	23 lbs.	7.45	7.05	6.85	6.60
3 x 3 x 3	1000	33 lbs.	7.85	7.45	7.30	7.00
3 x 3 x 4	1000	45 lbs.	8.20	7.80	7.60	7.20
4 x 4 x 4	1000	48 lbs.	9.20	8.80	8.60	8.20
4 x 4 x 4 with bottoms	1000	78 lbs.	14.40	14.00	13.80	13.40

Prices F.O.B. West Chicago, Ill., Isle, Minn., (Allentown, Pa. in fall and early winter).

NOTE: Plant Band sizes 1 3/4 x 1 3/4 x 2 1/2 and 2 x 2 x 2 1/2 also stocked during fall and early winter in Dallas, Texas, and shipped f.o.b. Dallas.



BALL Veneer "PLANTRAYS"

PlanTrays are designed to hold the various sizes of plant bands, or may be used without bands, as a small pack for plants. Several sizes are well suited for handling Jiffy-Potted plants. Ball **PlanTrays** are manufactured in the same careful manner as

Ball Veneer Plant Bands. They are shipped knocked down but with one edge of the bottom stitched to a side so that they may be assembled quickly. Thoroughly air-dried and kiln-dried, they are lighter in shipping weight.

The **X-type** holds 12 bands. The **SX-type** holds 25 bands.

Various sizes of PlanTrays may be combined for quantity price.

PRICES PER 1000 AS SHOWN BELOW

SIZE	DIMENSIONS	Shipping Units of	Weight Per Ctn.	0- 875	1000- 2375	2500- Up
No. 1-X	(5 7/8 x 7 3/4 x 2 1/2 — holds 12 1 3/4 x 2 1/2 bands)	125	25 lbs.	\$ 61.50	\$58.55	\$55.00
No. 2-X	(6 1/2 x 8 1/2 x 2 1/2 — holds 12 2 x 2 1/2 bands)	125	30 lbs.	66.90	63.60	59.75
No. 3-X	(8 1/8 x 10 5/8 x 2 1/2 — holds 12 2 1/2 x 2 1/2 bands)	125	36 lbs.	74.00	70.25	65.95
No. 4-X	(9 5/8 x 12 1/2 x 2 1/2 — holds 12 3 x 3 bands)	125	40 lbs.	81.00	76.90	72.00
No. 1-SX	(9 3/8 x 9 3/8 x 2 — holds 25 1 3/4 x 2 bands)	125	36 lbs.	74.00	70.25	65.95
No. 2-SX	(10 1/2 x 10 1/2 x 2 — holds 25 2 x 2 bands)	125	40 lbs.	81.00	76.90	72.00
No. 3-SX	(13 x 13 x 2 1/2 — holds 25 2 1/2 x 3 bands)	125	50 lbs.	103.50	99.50	95.25

Prices F.O.B. West Chicago, Ill., or Isle, Minn. Also in Allentown in fall and early winter.



Porta-Tubs 8"...12"...16"

"Porta-Tubs are the answer for spring combinations," says Mose Frink, wholesale pot plant grower of Cedar Falls, Iowa.

REASONS:

Attractive, clean bright "designer" colors draw favorable attention... durable and strong, yet light in weight... easy to handle,

8" DECORATIVE PORTA-TUBS (pictured above).

These 8" (outside top diameter) bright gold flecked tubs are ideal for combinations and pot covers.
Packed 24 per carton... available in separate or assorted colors.

White **Red** **Black** **Green**
Assorted (6 each, white, red, black, green).

Minimum order 24 tubs — one carton. Weight per carton, 10 lbs. Mailable.

	1-9 Cartons	10 up Cartons
Price per carton	\$10.56	\$9.60

8" PASTEL PORTA-TUBS

Pastel colored 8" (outside top diameter) Porta-Tubs are of "designer" shades created to accent plants to their fullest. Available in separate or assorted colors.

Persimmon **Aqua** **Dusty Pink** **White**
Assorted (6 each, Persimmon, Aqua, Dusty Pink, and White).

Minimum order 24 tubs — one carton. Weight per carton, 10 lbs. Mailable.

	1-9 Cartons	10 up Cartons
Price per carton	\$10.56	\$9.60

strong rims make this a practical tub... modern design, properly proportioned, accents any plant and is pleasing to the eye.

Porta-Tubs make ideal pot covers and planters... all-purpose growing-selling containers of exceptional beauty.

12" DECORATIVE PORTA-TUBS

12" (outside top diameter) Porta-Tubs with their gold flecks give distinction to large combination plantings... patio plants... large holiday plants.

Packed 12 per carton... available in separate or assorted colors.

White **Red** **Black** **Green**

Assorted (3 each, white, black, red, green).

Minimum order 12 tubs — one carton. Weight per carton, 17 lbs. Mailable.

	1-9 Cartons	10 up Cartons
Price per carton	\$19.80	\$18.00

16" SOLID COLOR PORTA-TUBS

These heavy weight octagon tubs are easy to handle even though fully planted with palms... giant specimen foliage plants, etc.

Forest Green **White**

Assorted (5 each, white and green).

Minimum order 10 tubs — one carton. Weight per carton, 25 lbs. NOT mailable.

	1-9 Cartons	10 up Cartons
Price per carton	\$26.50	\$24.10

All sizes F.O.B. West Chicago. Various sizes may be combined to obtain quantity prices.



Ritter Plastic Containers
 complement your plant material...
 reduce your transportation expense.

Ritter Plastic Pots

Ritter Plastic containers are made of durable, lightweight, high impact material, thus reducing breakage in transit and in the growing area. Their light weight and compact nesting are definite advantages in reducing transportation costs, inbound and outbound.

These attractive containers enhance and complement the plants grown in them — a reduced evaporation rate, yet ample drainage, gives uniform growth.

Ritter Plastic Pots are not stained by water, fertilizer, or other agents — surface will not support mold or bacterial growth, thus insuring an attractive container for the consumer.

ROUND POTS — Geraniums, Foliage, Pot Mums, Lilies, Annuals, etc.

Model No.	Dimensions	Wt. per case	Pack per case	Price per case	Price per 1000 1/9 Cases	10/99* Cases
R-200	2 x 2 in.	27 lbs.	2000	\$20.00	\$ 10.00	\$ 9.00
R-225	2 1/4 x 2 1/4 in.	34 lbs.	2000	21.50	10.75	9.70
R-250	2 1/2 x 2 1/2 in.	36 lbs.	2000	23.00	11.50	10.35
R-300	3 x 3 in.	34 lbs.	1000	15.50	15.50	13.95
R-400	4 x 4 in.	30 lbs.	500	14.75	29.50	26.55
R-500	5 x 5 in.	38 lbs.	300	18.00	60.00	54.00
R-600	6 x 6 in.	25 lbs.	120	11.40	95.00	85.50
R-700	7 x 7 in.	25 lbs.	72	11.16	155.00	139.50
R-800	8 x 7 in.	32 lbs.	100	20.00	200.00	180.00

ROUND TUBS or 3/4 POTS — Bulb stock, Azaleas, Geraniums, etc.

RT-350	3 1/2 x 2 3/4 in.	37 lbs.	1000	24.00	24.00	21.60
RT-400	4 x 2 7/8 in.	23 lbs.	500	14.00	28.00	25.20
RT-500	5 x 3 3/4 in.	38 lbs.	400	22.80	57.00	51.30
RT-600	6 x 4 1/2 in.	21 lbs.	120	9.84	82.00	73.80

SPACE SAVING SQUARE POTS — Annuals, Foliage, Geraniums, etc.

S-225	(2 1/4) 2 1/8 x 2 in.	30 lbs.	2000	\$20.00	\$ 10.00	\$ 9.00
S-250	(2 1/2) 2 3/8 x 2 1/8 in.	38 lbs.	2000	25.00	12.50	11.25
S-300	(3) 2 3/4 x 2 3/8 in.	31 lbs.	1000	17.00	17.00	15.30
S-400	(4) 3 3/4 x 3 1/4 in.	30 lbs.	500	15.00	30.00	27.00

SQUARE ROSE POTS — Nursery stock, Tubers, Perennials, etc.

Model No.	Dimensions	Wt. per case	Pack per case	Price per case	Price per 1000 1/9 Cases	10/99* Cases
SRP-250	2 3/8 x 3 1/4 in.	33 lbs.	1000	\$20.00	\$ 20.00	\$ 18.00

PLANTA CAN — Nursery stock, Hardy Mums, etc.

No. 10 (Gal.)	6 5/8 x 6 1/2 in.	43 lbs.	150	17.25	115.00	103.50
---------------	-------------------	---------	-----	-------	--------	--------

PERMA CANS — Jet Black Only

No. 5	Qt. Cans 5 x 4 in.	31 lbs.	400	25.20	63.00	56.70
No. 7	2 Qt. Cans 6 x 4 1/2 in.	21 lbs.	120	11.64	97.00	87.00
No. 10	Gal. Cans 6 5/8 x 6 1/2 in.	35 lbs.	150	19.50	130.00	117.00
No. 20	2 Gal. Cans 8 x 7 in.	27 lbs.	100	17.50	175.00	157.50

PLANTA PAKS — (Multipak for seedlings) Petunias, Marigolds, vegetable plants, etc.

BF-90	7 1/2 x 5 x 2 5/8	31 lbs.	200	12.00	60.00	54.00
BF-123	8 x 6 1/2 x 2 5/8	28 lbs.	150	9.75	65.00	58.50

*100 cases or more at 5% quantity discount from 10 case price and pre-paid; but must be made in one shipment.

No. 10 Planta Can, SRP-250, BF-90 and BF-123 in mottled colors only; Perma Cans in Jet Black only. All other sizes available in white at 10% additional F.O.B. Orlando, Florida.

Minimum Order, 1 case

F.O.B. Points: Stock carried in South Rockwood, Michigan; Orlando, Florida; West Chicago, Illinois; Allentown, Pennsylvania, and Dallas, Texas. **Will ship from nearest point where stock is available.**

CYCOCCEL

Plant Growth Regulant for Red Poinsettias

Cycocel produces a more compact Poinsettia; internodes are shortened and stems are thickened, thus reducing staking. Foliage is a darker green and bracts a deeper, richer red. Growers report that Cycocel treated plants resist wilting — stay fresh looking longer — have a longer "home life."

Cycocel has been tested extensively on Azaleas, Lilies, Geraniums, Camellias, and Carnations, and results similar to those with Poinsettias have been obtained.



PRICES

Per quart\$12.95
Per gallon 49.75
F.O.B. West Chicago, Ill.



plastic Poly-Paks

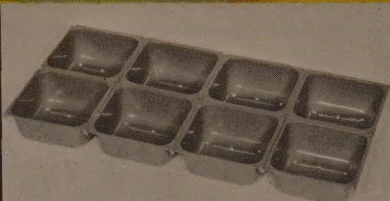
The clean modern Pak for modern bedding plant merchandising.

- Lightweight but strong
- Attractive in appearance
- Joined together for handling ease
- Saves labor — grows fine plants
- A size for every flat

How often have you wished you could handle six or eight Paks at a time when setting them up, or for Paks you could fill with a shovel without soil falling down between them to discolor the sides?



UNIT OF MODEL A-6



UNIT OF MODEL A-8



UNIT OF MODEL B-6



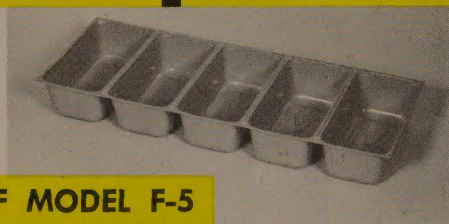
UNIT OF MODEL C-8



UNIT OF MODEL D-8



UNIT OF MODEL E-8



UNIT OF MODEL F-5

Here's your answer —

Poly-Paks

The POLY-PAK is a plant container designed to hold a dozen plants — made of plastic, strong but light. They are lightly fastened together at the corners to form units of 6 or 8 Paks; thus they can be placed readily into a flat, filling the flat with one motion. **A TIME AND LABOR SAVER.**

The neutral gray color of POLY-PAKS blends well with all flower and foliage colors to make an attractive unit. When ready for sale, POLY-PAKS are easily separated.

POLY-PAKS have adequate DRAINAGE, provided by ribbed bottom and numerous holes.

POLY-PAKS remain attractive...do not fade...no mold or algae grows on them...plants grow well in them.

Growers the country over are using more and more Poly-Paks — former flat growers use them because the home gardener now demands small units. Poly-Paks are a natural: easy to grow in, reasonably priced, save labor, easy to handle, growth can be controlled when desired, an excellent merchandising unit.

POLY-PAKS come in many flat sizes — pick yours and order today.

Model No.	Paks per Unit	Pak Dimensions Inside Top	Fit Flat Size	Weight Per Case	Units Per Case	1-9 Cases Per Case	10-49 Cases Per Case	50 Cases Up Per Case
A-6	6	5 x 6½ in.	21 x 11 x 2½ in.	30 lbs.	100 (600 Paks)	\$26.00	\$24.00	\$22.00
A-8	8	4¾ x 5 in.	21 x 11 x 2½ in.	30 lbs.	100 (800 Paks)	26.00	24.00	22.00
B-6	6	6¼ x 4⅞ in.	*16 x 13½ x 2¾ in.	30 lbs.	100 (600 Paks)	26.00	24.00	22.00
C-8	8	5 x 6½ in.	21½ x 13½ x 2½ in.	40 lbs.	100 (800 Paks)	31.20	28.80	26.40
D-8	8	4-7/16 x 4-7/16 x 2⅝ in.	22 x 11 x 2⅝ in.	30 lbs.	100 (800 Paks)	27.00	25.00	23.00
E-8	8	4½ x 6½ x 2¾ in.	20 x 14 x 2¾ in.	35 lbs.	100 (800 Paks)	29.00	27.00	25.00
F-5	5	4¼ x 8¼ x 2⅝ in.	21½ x 9 x 2¾ in.	45 lbs.	200 (1000 Paks)	31.50	29.50	26.50

Minimum order, 1 case. **Prices Prepaid** east of Continental Divide at above prices. West of Continental Divide, add \$2.50 per case of F-5; \$1.25 per case on all other sizes.

*Also fits standard Tomato or Grape Lugs.



plastic Poly-Pots ... convenience in handling

Poly-Pots are square plastic pots lightly fastened together at the corners — thus reducing the setup time and other handling immensely. 2 inch — 12 pot unit; 2½ inch — 12 pot unit; 3 inch — 6 pot unit; 4 inch — 15 pot unit. **These light weight but strong**

SIZES

2 inch — 2 x 2 x 2½ in. deep in units of 12 (4 x 3)

Use with Model 212 Poly-Tray

2½ inch — 2½ x 2½ x 2½ in. deep in units of 12 (4 x 3)

PRICES

Quantity	2-inch Per 1000	2½-inch Per 1000
3,000-27,000	\$ 9.00	\$12.25
30,000-72,000	8.50	11.50
75,000 up	8.00	10.75

Wt. per case18 lbs. 26 lbs.

Packed 3,000 per case. Prepaid east of the Continental Divide.
Prepaid west of the Continental Divide at 50c per 1,000 additional.
Minimum order 1 case.

neutral gray pots are excellent for: NURSERY STOCK, BEDDING PLANTS, VEGETABLES, PERENNIALS, FOLIAGE, etc.

Poly-Pots are ideal for shipping.

3 inch — 3 x 3 x 3 in. deep in units of 6 (2 x 3)

Use with Model 36 Poly-Tray

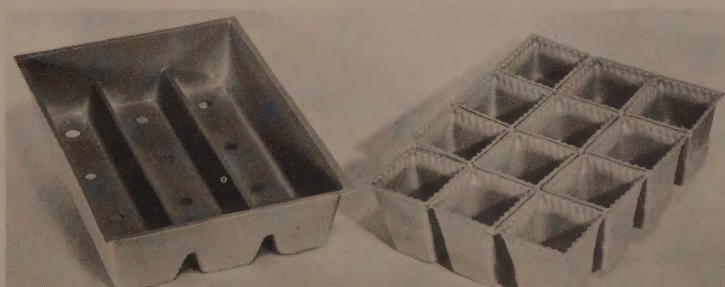
4 inch — 4 x 4 x 3 in. deep in units of 15 (5 x 3)

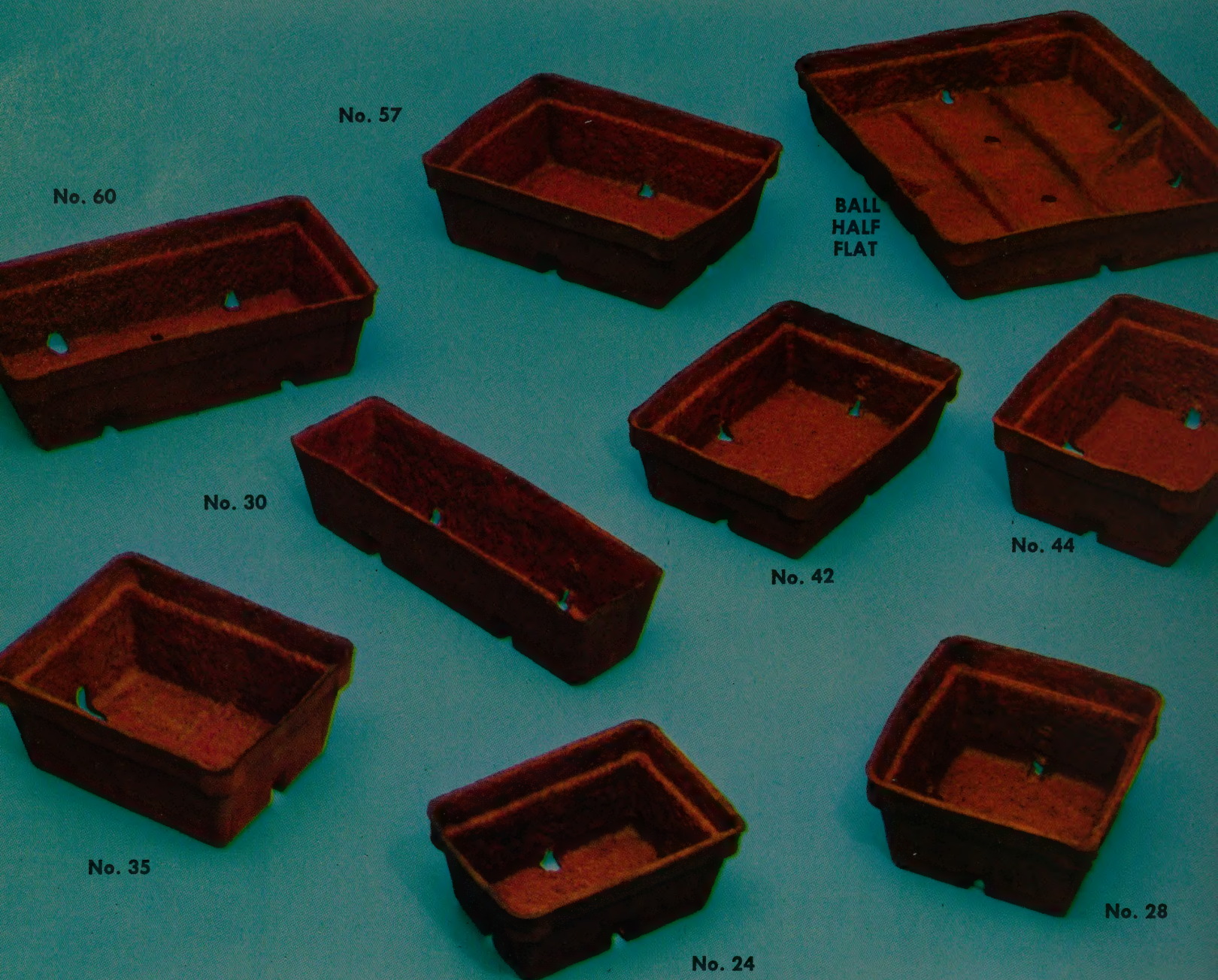
Quantity	3-inch Per 1000	4-inch Per 1000
1,500-13,500	\$17.50	\$22.00
15,000-43,500	16.50	20.00
45,000 up	15.50	18.00

Wt. per case25 lbs. 33 lbs.

Packed 1,500 per case. Prepaid east of the Continental Divide.
Prepaid west of the Continental Divide at \$2.00 per 1,000 additional.
Minimum order 1 case.

BE SURE TO SEE PAGE 126 FOR POLY-TRAYS. Each Tray holds a unit of Poly-Paks for convenient self-service sales. Can also be used as a package for 6 or 12 Jiffy-Potted plants.





MARKET-PAKS®—a SIZE for every plant!

With the addition of the No. 35 we have rounded out the line to "a size for every plant."

It's no single thing — but a lot of important advantages combined to make Market-Paks the "best buy" in paks.

Take, for example, the ease with which consumers can plant out of Market-Paks — they just tear away the wall, cut or tear the plants apart and set them out. Quite a difference between this and the difficulty of removing plants from other containers. This is a factor which growers can easily overlook — as they

don't have to do this job. But you may be sure it isn't overlooked at the market place — there it is viewed in dead earnest.

Selling plants from ordinary pots is more expensive — flats overload the customer with too many of one variety or color. Market-Paks are ideal from a sales standpoint — no wrapping — digging. This is Self Service.

For ease of display, elimination of losses, and the plus of self service selling, there's nothing in the container line better suited. Attractive in color, light in weight, durable with excellent drainage . . . there's a size for every bedding plant sale.

Each of the nine sizes pictured above has its use. PICK YOURS!

MARKET-PAK PRICES PREPAID on 150 lbs. or More East of the Continental Divide Only

WE WILL BE GLAD TO SEND YOU SAMPLES OF ANY SIZES ON REQUEST.

Market-Paks® the key to self-service

Prices PREPAID by truck or R.R. freight in lots of 150 lbs. or more east of the Continental Divide. Otherwise, F.O.B. West Chicago; Jersey City, N.J.; Allentown, Pa.; Toledo, Ohio; and Chase, Ala. Market-Paks not available. Market-Paks, Half Flats and Jiffy-Pots may be combined for minimum prepaid shipment at one time. Sizes may be combined for quantity prices.

	Quantity	Price Per 1000
No. 24. 4$\frac{1}{8}$ x 5$\frac{3}{4}$ x 2$\frac{1}{2}$ in. deep. A budget-sized package suitable for 12 upright annuals or 6 spreading plants such as Petunias or Pansies. 250 per case — 17 lbs. per case. Min. Order 250.	200-750 (250, \$8.20) 1000-9,750 10,000-49,750 50,000 up	\$ 32.80 30.80 28.80 26.80
No. 28. 5$\frac{1}{8}$ x 5$\frac{1}{2}$ x 2$\frac{3}{4}$ in. deep. A budget-pak for 12 plants, but a little larger than No. 24. Fit 8 to a flat 11 x 20 $\frac{1}{2}$ in. inside. 250 per case, 17 lbs. per case. Min. order 250.	250-750 (250, \$10.13) 1000-9,750 10,000-49,750 50,000 up	40.50 38.50 36.50 33.50
No. 30 2$\frac{7}{8}$ x 10$\frac{1}{4}$ x 2$\frac{3}{8}$ in. deep. Designed for 12 or 14 plants set in a double row. Fit 7 paks to a flat 10 $\frac{1}{2}$ x 20 $\frac{1}{2}$ in. 200 per case — 17 lbs. per case. Min. order 200.	200-800 (200, \$8.54) 1000-9,800 10,000-49,800 50,000 up	42.70 40.70 38.70 35.70
No. 35 5-3/16 x 6$\frac{3}{8}$ x 2$\frac{3}{4}$ in. Deep. NEW. A new size that fits 6 to a standard grape or tomato lug 13 $\frac{1}{2}$ x 16 inches. 200 per case, 19 lbs. per case. Min. order 200.	200-800 (200, \$9.00) 1000-9,800 10,000-49,800 50,000 up	45.00 43.00 41.00 38.00
No. 42. 5$\frac{1}{2}$ x 7$\frac{3}{4}$ x 2$\frac{3}{8}$ in. deep. This original Market-Pak has been used by thousands of growers for 12 well-grown plants. 200 per case — 20 lbs. per case. Min. order 200.	200-800 (200, \$9.20) 1000-9,800 10,000-49,800 50,000 up	46.00 44.00 42.00 39.00
No. 44. 5$\frac{1}{2}$ x 7$\frac{3}{4}$ x 2$\frac{3}{4}$ in. deep. Same as No. 42, but $\frac{3}{8}$ in. deeper, for plants requiring additional soil depth for optimum growth. 200 per case — 23 lbs. per case. Min order 200.	200-800 (200, \$10.30) 1000-9,800 10,000-49,800 50,000 up	51.50 49.50 47.50 44.50
No. 57. 6$\frac{3}{4}$ x 8$\frac{3}{8}$ x 2$\frac{3}{4}$ in. deep. No. 3 Grotainer size. A No. 517 Jiffy-Strip cut in half will fill a No. 57 Market-Pak. 200 per case — 26 lbs. per case. Min. order 200.	200-800 (200, \$14.80) 1000-9,800 10,000-49,800 50,000 up	74.00 70.00 66.00 62.00
No. 60. 6 x 10 x 2$\frac{5}{8}$ in. deep. Suitable for 1 or 2 dozen plants, depending on type and size or quality desired. 200 per case — 28 lbs. per case. Min. order 200.	200-800 (200, \$14.20) 1000-9,800 10,000-49,800 50,000 up	71.00 67.00 63.00 59.00
BALL HALF FLAT. 10 x 12 x 2$\frac{1}{2}$ in. deep. Holds 40 plants, 3 sq. in. per plant. Special rib-reinforced bottom. Can be used as seed flat. 200 per case — 50 lbs. per case. Min. order 200.	200-400 (200, \$24.00) 600-4,800 5,000 up	120.00 110.00 100.00



Mr. Herman Wallitsch of Louisville, Ky. grows 10,000 No. 42 Market-Paks of annuals which he retails via self service in his garden center. Mr. Wallitsch uses Market-Paks for his annuals: says THEY CAN'T BE BEAT!



Mr. Ed Hoffmann of Hubert Hoffmann Ghs. of Willmette, Ill. uses No. 60 Market-Paks for his annuals. "We have no trouble handling them, pick up four easily. The Market-Pak makes an ideal selling unit."



Bud Gahs of Fantom & Gahs, Baltimore, Md. holding No. 44 Market-Pak containing four Geraniums. Fantom & Gahs use picture labels in every single one of their 22,000 paks. Mr. Gahs says, "We get premium price with this combination."

Herculite Pots

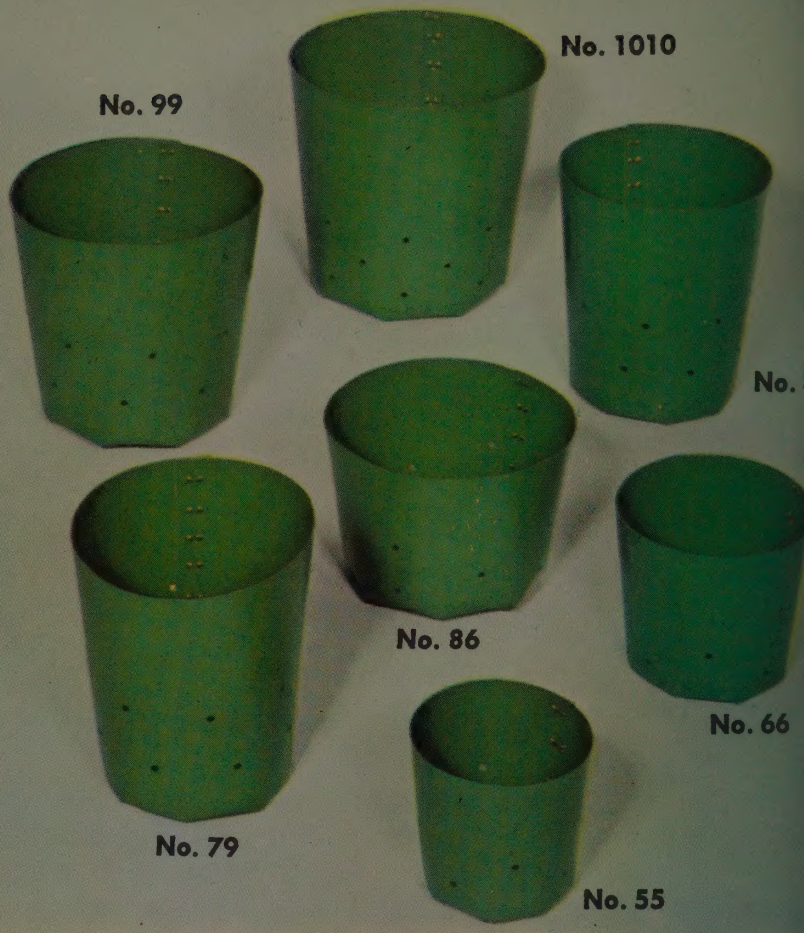
for Mums, Roses, Nursery Stock and Perennials

Offered for the first time last year, sales of Herculite Pots greatly exceeded our estimate. Growers have found them far superior to existing pots of this type.

Herculite Pots are made of a firm, new attractive green fiber material, and are **completely sprayed with polyethylene** which preserves their color and guards against rot for long periods of time. They are stronger, yet much lighter in weight than other perennial pots which means **lower shipping costs** and **less labor** in handling. Shipped **completely assembled** with well spaced drainage holes to provide aeration and **better growth**.

In addition to their use for Mums, Roses, Perennials and container grown Nursery Stock, many Nurserymen are finding the larger 10 inch and 12 inch sizes ideal for some dormant stock in place of conventional balling and burlapping.

At 13c and 23c each (1000 rate — F.O.B. shipping point), no economy-minded Nurseryman can afford the time-consuming labor involved in doing this job the old costly way. Nos. 76, 89, 97, 99, 108, 1010, and 1212 not available — F.O.B.

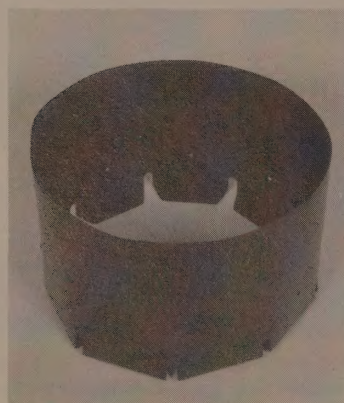


West Chicago; Allentown, Pa.; Wyandotte, Michigan and Chase, Alabama. 500 at 1000 rate. **Minimum order 1 carton.**

Quantity Discount of 5% allowed on orders of 25,000 or more.

PRICES

Model No.	Top Diam.	Bottom Diam.	Height	No. Per Carton	Wt. Per Carton	Price Per Carton	Price Per 1000	Model No.	Top Diam.	Bottom Diam.	Height	No. Per Carton	Wt. Per Carton	Price Per Carton	Price Per 1000
No. 44	4"	3½"	4"	200	9 lbs.	\$ 9.00	\$ 40.00	No. 89	8"	6¼"	9"	100	18 lbs.	\$ 8.50	\$ 80.00
No. 55	5"	4"	5"	200	14 lbs.	10.60	48.00	No. 97	9"	8"	7"	100	20 lbs.	10.40	91.00
No. 66	6"	5"	6"	200	20 lbs.	12.20	56.00	No. 99	9"	7"	9"	100	21 lbs.	11.00	96.00
No. 76	7"	6"	6"	100	13 lbs.	6.80	63.00	No. 108	10"	8"	8"	50	16 lbs.	6.85	122.00
No. 79	7"	5½"	9"	100	16 lbs.	8.00	74.00	No. 1010	10"	8"	10"	50	17 lbs.	7.50	130.00
No. 86	8"	7"	6"	100	14 lbs.	7.50	69.00	No. 1212	12"	10½"	12"	50	24 lbs.	13.00	230.00



**Perk up your retail sales . . .
Herculite "Rose Collars"
to winterize your customer's Roses.**

Designed to hold mulch around the plants to protect them from winter kill. Made of the same green polyethylene-sprayed fiber as Herculite pots. 7 in. high, 12 in. diameter. Packed six per carton, 24 cartons per case. Suggested retail price, 99c per carton. Shipping weight, 28 lbs. Cannot be shipped parcel post. **\$14.26** per case of 24 cartons. F.O.B. Wyandotte, Mich.; West Chicago Ill.; Allentown, Pa.

Jiffy-Pots®

MADE OF PEAT

*The modern approach to growing
Flower, Nursery and Vegetable Crops*



Jiffy-Pots, in the few years since they were first introduced, have brought many changes in the methods of growing flower, vegetable and nursery crops all over the world. In many instances they have replaced old-style pots, in others they have afforded an early start to plants that normally would be directly planted to bench, bed, field or garden. Composed of 75% long-fibered peat and 25% wood fiber, Jiffy-Pots are uniformly impregnated with sufficient nutrients to give young plants a good start. Roots grow right through the walls, permitting repotting into larger pots or benching without removing the Jiffy-Pots.

WRITE FOR YOUR FREE TECHNICAL BULLETINS

No. 11, Vegetables

No. 21, Florist Crops

No. 31, Bedding Plants

No. 41, Nursery Crops

Retail JIFFY-POTS — in "Pick-up" Packages



No. JG175S12 JIFFY-GROWER

Just add Seeds and Water! Complete with plastic tray to fit any window sill. Contains enough special nutrient treated vermiculite soil medium to fill all pots; has a strip of 12 1 1/4" square Jiffy-Pots made of peat; special poly bag to speed seed germination and full cultural instructions on colorful display sleeve. Packed 36 per case, weight 19 lbs. Dealers' cost, **\$19.01**. Retail per unit, 88c.

JIFFY-POT COM-PAK — 144 Assorted Retail Packs
Shipping Weight 37 lbs.

Consists of:

60 Retail Netting Packs, 1 doz. 2 1/4" Round (44c Retail)
12 Retail Netting Packs, 2 doz. 2 1/4" Round (77c Retail)
36 Retail Netting Packs, 1 doz. 3" Round (69c Retail)
12 Retail Netting Packs, 1 doz. 2 1/4" Square (49c Retail)
12 Retail Netting Packs, 1/2 doz. 3 1/2" Round (59c Retail)
12 JIFFY-GROWERS (88c Retail)

Retail Value \$84.00

Your cost per case \$50.40



Once you display the new retail "Pick-Up" packages of Jiffy-Pots, you start a sales trend that keeps building for you. If you haven't tried them yet, put in your order now and watch your peat pot sales grow.

F.O.B. West Chicago, Ill. 150 lbs. or more prepaid East of Continental Divide. Sold in case lots only.

Item	Pot Size	Pots Per Pkg.	Shpg. Wt. Case	Dir. Unit Cost	Dir. Cost Per Cs.	Retail Per Pkg.
R225JP12	2 1/4" Rd.	12	14 lbs.	\$0.26	\$19.01	\$0.44
R225JP24	2 1/4" Rd.	24	25 lbs.	.47	33.27	.77
S225JP12	2 1/4" Sq.	12	18 lbs.	.30	21.17	.49
R300JP12	3" Rd.	12	28 lbs.	.42	29.81	.69
R350JP6	3 1/2" Rd.	6	23 lbs.	.36	25.49	.59
B225JP50	2 1/4" Rd.	50	51 lbs.	.96	57.24	1.59
B225JP100	2 1/4" Rd.	100	48 lbs.	1.60	47.88	2.66
B300JP50	3" Rd.	50	41 lbs.	1.43	43.02	2.39
B300JP100	3" Rd.	100	41 lbs.	2.34	35.01	3.89
JIFFY GROWER		12	19 lbs.	.40	19.01	.88



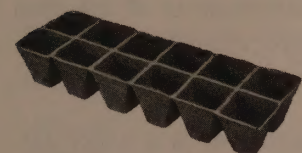
Jiffy-Pots[®] . . . gain you customer satisfaction . . . Repeat sales, with a plant container that they can "Plant Pot 'n All" with no set-back or shock. . . . They take right off.

"Best New Container Idea since the Jiffy-Pot..."

... that's what they're saying about

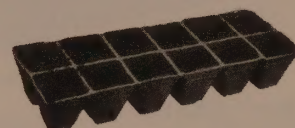
the new **Jiffy-Strips**
MADE OF PEAT

World-famous Jiffy-Pots, 1 3/4" square or 2 1/4" square, molded in strips, offer these advantages:



Set-up time is cut to a fraction — pots are handled twelve at a time instead of one.

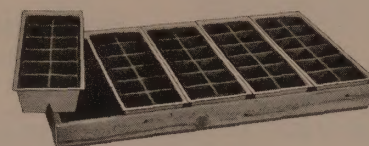
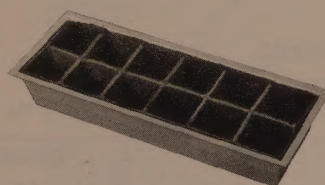
Soil filling job is greatly simplified — can be done easily with a shovel as pots stay level.



It's easier to water more evenly — pots are all standing perfectly straight.

Ideal for bedding plants... especially when handled in plastic Poly-Trays. Jiffy-Strips reduce man-handling of individual pots by customers... easily separated when ready for planting.

A No. 517 Strip, cut in half, fits into a No. 57 Market-Pak.
See page 126 for Poly-Tray prices.



PRICES OF JIFFY-POTS AND JIFFY-STRIPS

Model No.	Top Diam. and Shape	Depth of Pot	Ship Wt. per Case	Pots per Case	*Eastern States PER 1000 POTS				*Western States PER 1000 POTS			
					Per Case	1-9 Cases	10-24 Cases	25** Cases up	Per Case	1-9 Cases	10-24 Cases	25** Cases up
115	1 1/2 in. round	1 3/4 in.	17 lbs.	3000	\$17.85	\$ 5.95	\$ 5.70	\$ 5.45	\$18.75	\$ 6.25	\$ 5.99	\$ 5.72
122	2 1/4 in. round	2 3/4 in.	35 lbs.	3000	23.85	7.95	7.60	7.25	25.05	8.35	7.98	7.61
130	3 in. round	3 in.	35 lbs.	1500	21.00	14.00	13.35	12.70	22.05	14.70	14.02	13.34
217	1 3/4 in. square	2 3/8 in.	35 lbs.	3000	22.80	7.60	7.25	6.90	23.94	7.98	7.61	7.25
222	2 1/4 in. square	2 3/4 in.	35 lbs.	2500	22.75	9.10	8.70	8.30	23.90	9.56	9.14	8.72
230	3 in. square	3 in.	35 lbs.	1000	16.90	16.90	16.15	15.40	17.75	17.75	16.96	16.17
335	3 1/2 in. shorty	3 in.	40 lbs.	1000	19.30	19.30	18.45	17.60	20.27	20.27	19.37	18.48
340	4 in. round	3 3/4 in.	35 lbs.	750	23.25	31.00	29.50	28.00	24.41	32.55	30.98	29.40
425	2 1/2 in. X-tra Deep	3 1/8 in.	35 lbs.	2000	21.20	10.60	10.10	9.60	22.26	11.13	10.61	10.08
517	1 3/4 in. Jiffy-Strip	2 3/8 in.	40 lbs.	3600	26.28	7.30	6.95	6.60	27.61	7.67	7.30	6.93
522	2 1/4 in. Jiffy-Strip	2 3/4 in.	40 lbs.	2400	21.36	8.90	8.50	8.10	22.44	9.35	8.93	8.51

**Additional Quantity Discounts:

Orders of \$1500 2% discount from 25 case price.
Orders of \$3000 3% discount from 25 case price.
Orders of \$4500 4% discount from 25 case price.
Orders of \$6000 5% discount from 25 case price.

*Western States prices apply in the following states: Arizona, Alaska, California, Hawaii, Idaho, Nevada, Oregon, Utah and Washington. Eastern States prices apply to all other States.

Various sizes may be combined to obtain quantity prices. SOLD IN CASE LOTS ONLY.

PREPAID via truck or railway freight in lots of 150 lbs. or more in the continental United States excluding Alaska and Hawaii. Otherwise f.o.b. West Chicago; Jersey City, N.J.; Allentown, Pa.; Toledo, Ohio; Houston, Tex.; Los Angeles, Calif.; San Francisco, Calif.; Portland, Ore.; Mobile, Ala.

Jiffy-Pots, Market-Paks and Half Flats may be combined to make up 150 lbs. minimum order for prepaid shipment provided order is for shipment at one time and is east of the Continental Divide.

Practical TRAYS for Merchandising

POLY-TRAYS



J-26 above.

Poly-Tray J-175 left.

POLY-TRAYS

Convenient and attractive plastic trays, light but strong. Holding six or a dozen Jiffy-Potted plants, they make ideally-sized units of sale for bedding plants. Have slots in bottom for drainage.

PRICES

*EASTERN STATES

Per 1000 Trays

Model No.	1-9 Cs.	10-24 Cs.	25 Cs. up	1-9 Cs.	10-24 Cs.	25 Cs. up
No. J-617	\$43.00	\$40.00	\$37.00	\$46.00	\$43.00	\$40.00
No. J-175	58.00	55.00	52.00	62.00	59.00	56.00
No. J-26	58.00	55.00	52.00	62.00	59.00	56.00
No. J-225	74.00	70.00	66.00	79.00	75.00	71.00
No. 212	84.90	79.90	74.90	89.90	84.90	79.90
No. 36	89.90	84.90	79.90	94.90	89.90	84.90

*WESTERN STATES

Per 1000 Trays

Prepaid in lots of 5 cases or more in the continental United States, excluding Alaska and Hawaii. Not mailable.

*WESTERN STATES prices apply in Alaska, Arizona, California, Hawaii, Idaho, Nevada, Oregon, Utah and Washington. EASTERN STATES prices apply to all other states.



At Lund's Flowers, Warrenville, Ill., Dwight Lund (left) finds the combination of Jiffy-Strips No. 517 in Poly-Trays No. 175 make a very convenient unit of sale.



Krismer's of Cincinnati, Ohio, (right) also grow many thousands of bedding plants this way. They put four Poly-Trays with Jiffy-Strips in a skeleton flat for faster handling.

Jiffy-Pots[®] and Jiffy-Strips



**JIFFY-
BASKETS**

This plastic Jiffy-Basket holds six 2¼ inch **square Jiffies** — just tight enough for a firm fit, yet not too tight for easy removal. In this way you have a **convenient unit of sale** and yet the customer does not handle individual plants.

Although attractive in themselves, Jiffy-Baskets' open construction makes them inconspicuous — an important point, for the **pots can be easily seen and root growth noted.**

Bedding plants in Jiffy-Pots, six to a Jiffy-Basket, make a perfect combination of high quality plants and economical mass handling.

	Per 1000
1000-4000	\$31.00
5000-9000	28.00
10,000 up	26.00

Prices **PREPAID** east of the Continental Divide. **PREPAID** west of the Continental Divide at \$2.00 per 1000 added to above prices. Packed 1000 per case. **MINIMUM ORDER 1000.** Shipping weight per case 33 lbs.

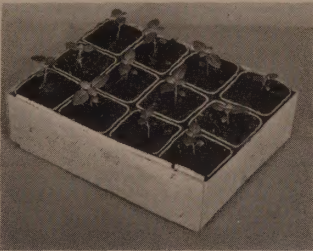


Harry Reid of Reid's Flowers, Kokomo, Indiana, finds that Jiffy-Baskets enable him to sell six plants as a unit instead of singly.



VENEER PLANTRAYS

Make a convenient carrier for Jiffy-Potted plants, both during the growing period and when displaying them for sale. The variety of sizes allows for many different quantities of pots in various sizes.



◀ 12 — 2¼ in. Jiffy-Potted Snap Seedlings in 2X PlanTray.
12 — 2¼ in. Jiffy-Potted Coleus in 2X PlanTray. ▶



VENEER PLANTRAY PRICES

Per 1000 as shown below

Size	Quantities and sizes of Jiffy-Pots Held	Shipping Units of	Weight per 1000	125-875	1000-2375	2500-Up
No. 2X.	12 2¼ in. Round or 6 3 in. Round	125	240 lbs.	\$ 66.90	\$63.60	\$59.75
No. 4X.	48 1½ in. Round, 16 2¼ in. Round or Square, or 9 3 in. Round or Square	125	320 lbs.	81.00	76.90	72.00
No. 1-SX.	36 1½ in. Round, 16 2¼ in. Round or Square, or 9 3 in. Round or Square	125	288 lbs.	74.00	70.25	65.95
No. 2-SX	49 1½ in. Round or 9 3½ in. Shorty	125	320 lbs.	81.00	76.90	72.00
No. 3-SX.	64 1½ in. Round, 36 2¼ in. Round, 16 3 in. Round or Square, or 9 4 in. Round	125	400 lbs.	103.50	99.50	95.25

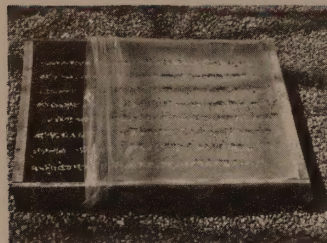
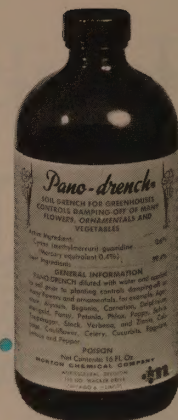
F.O.B. West Chicago or Isle, Minn. Various sizes may be combined to obtain quantity price.

USE THESE PROVEN AIDS TO GOOD GERMINATION

PANO-DRENCH

An effective control for damp-off, stem and root rot. Used as a pre-emergence or post-emergence drench — two teaspoons to three gallons of water — applied with an ordinary sprinkling can. Try it.

1-oz. bottle, **\$1.95**; 4-oz. bottle, **\$5.95**; 16-oz. bottle, **\$19.20**; four 16-oz. bottles, **\$57.60**; 1-gal. bottle, **\$98.60, net, prepaid.**

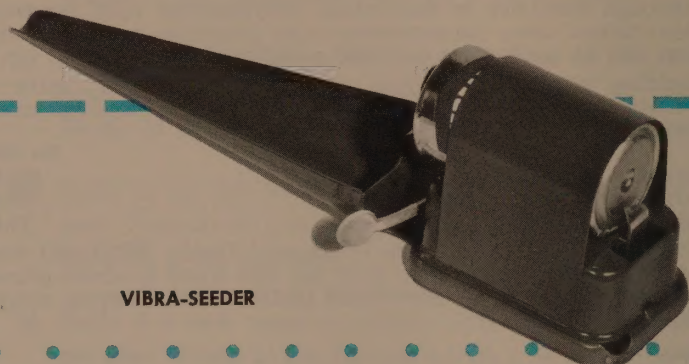


PLASTICCOVER

BALL PLASTICOVER

Here's a proven idea to simplify your germination problems. Seeds protected by a Plasticover seldom need additional watering before germination. To use, sow the seed in your usual way and water thoroughly. Then cut a piece of tubing

long enough to slip over the flat and fold under at each end. When seed is well up, remove the Plasticover and continue normal care. Roll, 20 inches wide and 100 feet long, **\$5.00 net, prepaid.**



VIBRA-SEEDER

VIBRA-SEEDER

Now greatly improved to give maximum vibration for seed sowing. No parts to change, takes all sizes and shapes of seeds with the same easy vibrating action, which assures an even flow of seed and ultimately an even stand of seedlings. Flashlight batteries not included. **\$3.25 net, prepaid.**

G. E. HEATING CABLE For Supplementary Heating

By the use of a heating cable, soil temperatures can be maintained from 15 to 20° higher than the air temperature in the greenhouse. An excellent supplementary heat item for germination and a multitude of other uses.

PRICE: **\$15.50** Lead coated — 60 ft. long — Wt.: 12 lbs.

F.O.B. West Chicago.

Thermostats — Price: **\$7.85.**



WOOD POT LABELS — UNPRINTED

PLAIN					*PAINTED				
	Per 500	Per 1000	2M-9M Per 1000	10,000 up Per 1000	Per 500	Per 1000	2M-9M Per 1000	10,000 up Per 1000	
COPPER WIRED TREE LABELS									
3 1/2 in. x 5/8 in.	—	\$ 4.60	\$ 4.40	\$ 4.30	—	\$ 5.70	\$ 5.50	\$ 5.40	
POT LABELS									
4 in. x 5/8 in.	—	3.85	3.65	3.55	—	4.65	4.45	4.35	
5 in. x 5/8 in.	—	4.20	4.00	3.90	—	5.05	4.85	4.75	
6 in. x 5/8 in.	—	4.60	4.40	4.30	—	5.60	5.40	5.30	
8 in. x 5/8 in.	\$3.60	6.55	6.35	6.20	\$4.35	8.05	7.85	7.70	
10 in. x 5/8 in.	4.35	7.95	7.90	7.80	5.30	9.75	9.70	9.60	
12 in. x 5/8 in.	5.00	9.40	9.35	9.25	6.15	11.55	11.50	11.40	
GARDEN LABELS	Per 250	Per 500	Per 1000	2000 up Per 1000	Per 250	Per 500	Per 1000	2000 up Per 1000	
8 in. x 7/8 in.	\$2.90	\$ 5.05	\$ 9.55	\$ 9.50	\$3.50	\$ 5.80	\$10.95	\$10.85	
10 in. x 7/8 in.	3.40	5.90	10.50	10.40	3.80	6.75	12.60	12.50	
	Per 100	Per 500	Per 1000	2000 up Per 1000	Per 100	Per 500	Per 1000	2000 up Per 1000	
12 in. x 1 1/8 in.	\$2.45	\$10.25	\$19.50	\$19.40	\$2.70	\$11.45	\$21.95	\$21.85	

POT LABELS ARE CARTONED ONLY IN QUANTITIES LISTED AT LEFT. We Cannot Break Cartons

ALL PRICES NET — PREPAID IN CONTINENTAL U.S.

All shipments under the above terms to be made by regular parcel post or truck at our option.

*PAINTED LABELS are lightly coated with a thin paint preservative, in accordance with government standards, to insure longer life and greater legibility.

WOOD and PLASTIC LABELS PRINTED

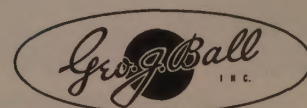
We offer **Printed**, 4-inch labels in convenient bundles of 100 of all **Sweet Sixteen Varieties** plus other popular varieties. See page 5.

SAMPLES ON REQUEST

WHITE PLASTIC POT LABELS — UNPRINTED

A durable, semi-rigid plastic marker which takes pencil readily, lasts indefinitely.

POT LABEL SIZES	Per 500	Per 1000	2M-9M per 1000	10,000 up per 1000
4 in. x 5/8 in.	—	\$4.75	\$4.60	\$4.50
5 in. x 5/8 in.	—	5.65	5.50	5.40
6 in. x 5/8 in.	—	6.50	6.40	6.30
8 in. x 5/8 in.	\$4.25	8.30	8.15	8.00



**PETUNIA
BALLERINA**


HT. 12-15" BEDDING
SPACE 12-15"
FULL SUN

Holds salmon color under hot sun.

ta
tag-along
T.M. APPLIED FOR

This year *merchandise* your bedding plants with . . .

ta *tag-along*^{T.M.} labels

In 3 ways more salesworthy than ordinary labels

- 1** Heavy weight (.015) pure white vinyl plastic, bright, clean, long-lasting. The general appearance of Tag-Along labels improves the salability of any plant.
- 2** True-to-life authentic four-color pictures show your customer what the bloom really looks like in color and shape. It's easy for her to imagine this flower in her garden. This helps to close the sale—creates impulse purchases.
- 3** Detailed, take-home cultural information about planting requirements: sun or shade, spacing, height, suggestions for combination plantings, etc., help answer questions, increasing sales and saving your and your clerks' time.

Tag-Along labels can do an important supplementary selling job for you this season. They do it quickly and quietly, informing the prospective buyer of the name, color, form of flower, and giving him planting information and suggestions for use.

Tag-Along labels can be used in connection with posters, streamers, and Jumbo Cards, tying the presentation together at the point of sale where it counts most—right with the plants.

Tag-Along will put salesworthy packaging into your 1963 bedding plant offer.

Where else can you hire a salesman for a



?

PRICES of TAG-ALONG Labels

This clean white vinyl label, printed in full natural color, with brief cultural information, will help increase your plant pak sales. Long-lasting, fade-resistant inks stand up under greenhouse and outdoor weather conditions. Labels are 1 1/8" wide and 5 1/2" long, pointed for easy insertion into the soil.

Minimum order 500 labels, 25 of a variety. Sold **only** in multiples of 25.

Samples, 1 each of 32 Sweet Sixteen Varieties, available on request. See other side for variety list

Net Prepaid	Per 100
500 to 975	\$1.35
1,000 to 4,975	1.25
5,000 to 24,975	1.15
25,000 to 99,975	1.05
100,000 up	.95

tag-along VARIETY LIST—Write in space allotted how many you want of a variety.

Minimum order 500 labels, 25 of a variety. Sold ONLY in multiples of 25.

_____ 1 Ageratum Blue	_____ 110 Pansy Mix	_____ 310 Salvia Blue
_____ 4 Ageratum Blue Mink (SS)	_____ 201 Petunia Ballerina	_____ 311 Salvia Dwf. Red
_____ 5 Alyssum Carpet of Snow (SS)	_____ 202 Petunia Bingo	_____ 312 Salvia Med. Red
_____ 6 Alyssum Royal Carpet	_____ 205 Petunia Blue Lustre	_____ 313 Salvia Tall Red
_____ 7 Alyssum Pink	_____ 207 Petunia Blue Magic (SS)	_____ 317 Salvia St. John's Fire (SS)
_____ 8 Alyssum Rosie O'Day	_____ 210 Petunia Cavalier (SS)	_____ 401 Snap Orchid Rocket
_____ 9 Aster	_____ 212 Petunia Chiffon	_____ 402 Snap White Rocket
_____ 10 Aster Ball Florist (SS)	_____ 213 Petunia Comanche (SS)	_____ 403 Snap Pink Rocket
_____ 19 Balsam Color Parade	_____ 214 Petunia Crusader (SS)	_____ 404 Snap Yellow Rocket
_____ 45 Carnation Chabaud Mix	_____ 215 Petunia Coral Satin	_____ 405 Snap Red Rocket
_____ 46 Celosia Toreador	_____ 216 Petunia Fandango	_____ 407 Snap Rocket Mix (SS)
_____ 47 Celosia Forest Fire	_____ 221 Petunia Glitters	_____ 416 Stock
_____ 52 Cleome Pink Queen	_____ 222 Petunia Honey Bunch	_____ 420 Verbena Ideal (SS)
_____ 60 Coleus Rainbow Mix (SS)	_____ 225 Petunia Kandy Kane	_____ 430 Vinca Coquette
_____ 61 Coleus Candidum	_____ 229 Petunia Maytime (SS)	_____ 432 Vinca Bright Eye
_____ 62 Coleus Pink Rainbow	_____ 235 Petunia Paleface (SS)	_____ 441 Zinnia Cactus Flwd. Mix
_____ 63 Coleus Red Rainbow	_____ 236 Petunia Pink Cascade	_____ 442 Zinnia Lilliput Mix
_____ 64 Coleus Velvet Rainbow	_____ 237 Petunia Pink Magic (SS)	_____ 443 Zinnia Dahlia Flwd. Mix
_____ 68 Dahlia Unwins Dwf. Mix (SS)	_____ 239 Petunia Pink Velvet (SS)	_____ 446 Zinnia Firecracker
_____ 70 Dianthus Wee Willie	_____ 241 Petunia Prima Donna	_____ 448 Zinnia State Fair Mix (SS)
_____ 71 Dianthus Bravo (SS)	_____ 242 Petunia Red Cascade	_____ 449 Zinnia Thumbelina (SS)
_____ 75 Geranium Pink	_____ 243 Petunia Red Satin	_____ 500 Gdn. Mum Ann Ladygo (SS)
_____ 76 Geranium Red	_____ 247 Petunia Salmon Magic	_____ 501 Gdn. Mum Corsage Cushion (SS)
_____ 77 Geranium White	_____ 248 Petunia Satellite (SS)	_____ 502 Gdn. Mum Dollie-Ette (SS)
_____ 81 Impatiens Pixie White	_____ 254 Petunia Snow Magic	_____ 503 Gdn. Mum Jess. Williams (SS)
_____ 82 Impatiens Dwf. Bright Orange	_____ 259 Petunia Sugar Plum (SS)	_____ 504 Gdn. Mum Joybringer (SS)
_____ 83 Impatiens Dwarf (SS)	_____ 261 Petunia Tango (SS)	_____ 505 Gdn. Mum Kings Ransom (SS)
_____ 84 Impatiens Red Jewel	_____ 262 Petunia White Magic (SS)	_____ 506 Gdn. Mum Lipstick (SS)
_____ 88 Lobelia Crystal Palace	_____ 263 Petunia White Sails	_____ 507 Gdn. Mum Maj. Cushion (SS)
_____ 90 Marigold	_____ 264 Petunia White Velvet	_____ 508 Gdn. Mum Minnpink (SS)
_____ 93 Marigold Naughty Marietta	_____ 265 Petunia Wh. Cascade (SS)	_____ 509 Gdn. Mum Mischief (SS)
_____ 94 Marigold Tall	_____ 270 Petunia Cal. Gts. #1	_____ 510 Gdn. Mum Ostosa (SS)
_____ 95 Marigold Dwarf	_____ 273 Petunia Allegro	_____ 511 Gdn. Mum Remembrance (SS)
_____ 97 Marigold Petite (SS)	_____ 276 Petunia Large Dbl. (SS)	_____ 512 Gdn. Mum Ruby Mound (SS)
_____ 98 Marigold Petite Yellow	_____ 277 Petunia Sonata	_____ 513 Gdn. Mum Spellbound (SS)
_____ 99 Marigold Petite Orange	_____ 278 Petunia Cherry Tart (SS)	_____ 514 Gdn. Mum Wh. Cushion (SS)
_____ 100 Marigold Petite Gold	_____ 279 Petunia Multiflora Mix	_____ 515 Gdn. Mum Yel. C. Columbus (SS)
_____ 102 Marigold Spun Gold	_____ 285 Petunia Calypso (SS)	_____ 809 Eggplant
_____ 103 Marigold Spry	_____ 300 Phlox Globe (SS)	_____ 819 Green Pepper Calif. Wonder
_____ 107 Marigold Crackerjack (SS)	_____ 301 Phlox Twinkle	_____ 822 Tomato Big Boy®
_____ 114 Nemesis	_____ 305 Portulaca Dbl. Mix. (S)	_____ 837 Tomato

(SS) indicates Sweet Sixteen Variety



Please send items indicated.

Shipping date

Ship to (if different from mailing address)

Firm Name (Please print) _____

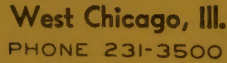
St. or RFD _____

City _____ Zone _____ State _____

Remittance MUST accompany order unless credit has been established.

LIMITATION OF WARRANTY, GEO. J. BALL, INC., WARRANTS, TO THE EXTENT OF THE PURCHASE PRICE, THAT SEEDS, PLANTS, BULBS, GROWERS SUPPLIES AND OTHER MATERIALS SOLD ARE AS DESCRIBED ON THE CONTAINER, WITHIN RECOGNIZED TOLERANCES. WE GIVE NO OTHER OR FURTHER WARRANTY, EXPRESS OR IMPLIED.

DELAYS IN DELIVERY, GEO. J. BALL, INC., SHALL NOT BE RESPONSIBLE FOR LOSS OR DAMAGE CAUSED BY DELAYS IN DELIVERY FROM STRIKES, ACTS OF WAR, FIRE, CASUALTY, INABILITY TO OBTAIN MATERIALS, OR OTHER CAUSES BEYOND OUR CONTROL.



Date 19

Shipping Date

SHIP TO
(If different from above)

F.O.B. WEST CHICAGO EXCEPT SEEDS SHIPPED PARCEL POST WITHIN THE U.S. OR AS NOTED IN OUR CATALOG. Be sure to check how shipment should be made, otherwise we'll use our best judgment.

- ☐ RY. EXP. ☐ AIR FRT. ☐ AIR MAIL
☐ FRT. ☐ AIR EXPRESS ☐ AIR PARCEL POST IF YOU NEED MORE ORDER
☐ TRUCK ☐ PARCEL POST ☐ 1st CLASS MAIL BLANKS — CHECK HERE —

IF YOU NEED MORE ORDER
BLANKS — CHECK HERE —————→

DELAYS IN DELIVERY. Geo. J. Ball, Inc. shall not be responsible for loss or damage caused by delays in delivery from strikes, acts of war, fire, casualty, inability to obtain materials, or other causes beyond our control.

[illegible]

Total this side	\$
-----------------	----

9/62

Whise.

Type of Sale & Remittance
Pd. _____ Chg. COD
Cash Ck. M.O. c/s Stp.

Terms

OTHER

Memphis

WC Dir

Grower

P. Post

Card

st. Total :

	Credit	Debit
1900		
1901		
1902		
1903		
1904		
1905		
1906		
1907		
1908		
1909		
1910		
1911		
1912		
1913		
1914		
1915		
1916		
1917		
1918		
1919		
1920		
1921		
1922		
1923		
1924		
1925		
1926		
1927		
1928		
1929		
1930		
1931		
1932		
1933		
1934		
1935		
1936		
1937		
1938		
1939		
1940		
1941		
1942		
1943		
1944		
1945		
1946		
1947		
1948		
1949		
1950		
1951		
1952		
1953		
1954		
1955		
1956		
1957		
1958		
1959		
1960		
1961		
1962		
1963		
1964		
1965		
1966		
1967		
1968		
1969		
1970		
1971		
1972		
1973		
1974		
1975		
1976		
1977		
1978		
1979		
1980		
1981		
1982		
1983		
1984		
1985		
1986		
1987		
1988		
1989		
1990		
1991		
1992		
1993		
1994		
1995		
1996		
1997		
1998		
1999		
2000		
2001		
2002		
2003		
2004		
2005		
2006		
2007		
2008		
2009		
2010		
2011		
2012		
2013		
2014		
2015		
2016		
2017		
2018		
2019		
2020		
2021		
2022		
2023		
2024		
2025		
2026		
2027		
2028		
2029		
2030		
2031		
2032		
2033		
2034		
2035		
2036		
2037		
2038		
2039		
2040		
2041		
2042		
2043		
2044		
2045		
2046		
2047		
2048		
2049		

三

ABOVE FOR OFFICE USE ONLY

Include a copy with your order!

Total — \$

Our purpose all through our more than 50 years in the florist industry has been to provide "all the best — nothing else" for your growing needs. If you have any suggestions or comments, we'd appreciate your writing them in the space below.

FIRST CLASS

PERMIT NO. 1

WESTCHICAGO, ILL.

BUSINESS REPLY MAIL

NO POSTAGE STAMP NECESSARY IF MAILED IN THE UNITED STATES

POSTAGE WILL BE PAID BY



WEST CHICAGO, ILL.



CATALOG No. 81 — SPRING 1963 — BUSINESS TERMS

PLANTS, BULBS, CONTAINERS AND OTHER SUPPLIES (Except where noted)

Cash with order: 2% (Mylar, 3%) **Charge orders:** 2% 10 days
Plant Containers and other supplies **cannot** be sent C.O.D.

SEEDS

Cash with order or C.O.D.

Under \$10.00	Net	\$100.00 to \$300.00	10%
\$10.00 to \$25.00	5%	\$300.00 and over	12%
\$25.00 to \$100.00	8%		

Charge Seed Orders if paid within 30 days from date of invoice:

Under \$10.00	Net	\$100.00 to \$300.00	8%
\$10.00 to \$25.00	2%	\$300.00 and over	10%
\$25.00 to \$100.00	5%		

All invoices are due and payable 30 days after invoice date.

If this is your first order, it should be signed with some individual's name in writing. Payment should accompany all orders unless credit has been established. C.O.D. shipments 50% in advance.

All prices in this catalog subject to change without notice.

All Seed Sent Prepaid to U.S., its possessions, or Canada — except on orders weighing over 2 ounces, where customer requests

first class mail, air mail or other special carrier, extra shipping costs will be charged.

IMPORTANT. Make checks or money orders payable in U. S. funds to **Geo. J. Ball, Inc. WEST Chicago, Illinois.** Not responsible for currency sent in the mail. Do not send stamps.

Business Hours (Holidays excepted) are 8:00 to 12:00 and 1:00 to 5:00, Monday through Friday.

Phone West Chicago 231-3500 (for direct distance dialing, dial 312-231-3500). Cable address, **BALLSEEDS. TWX WEST CHICAGO ILL. 2629.**

THIS CATALOG IS FOR COMMERCIAL GROWERS ONLY.

Shortages. All items are offered subject to crop failures or shortages.

LIMITATION OF WARRANTY. Geo. J. Ball, Inc., warrants to the extent of the purchase price, that seeds, plants, bulbs, growers supplies and other materials sold are as described on the container, within recognized tolerances. We give no other or further warranty, express or implied.

DELAYS IN DELIVERY. Geo. J. Ball, Inc., shall not be responsible for loss or damage caused by delays in delivery from strikes, acts of war, fire, casualty, inability to obtain materials, or other causes beyond our control.

INDEX

SEEDS (Pages 4-82)

Page	Page	Page	Page	Page
Achillea 7	CELOSIA 17	Feverfew, see 37	Lathyrus 33	Primula 55
Achimenes 7	Centaurea 18	Matricaria 37	Lavandula 33	Pteris 27
Aconitum 7	Cerastium 18	Foliage Plant seeds 27	Liatris 33	Pyrethrum 53
Adiantum 27	Cheiranthus 18	Freesia 26	Lily 33	Ricinus 53
African Violet, see 56	Cherry, Christmas 18	Fuchsia 26	Linaria 33	Rose 56
Saintpaulia 56	Chrysanthemum 18	Gaillardia 26	Linum 33	Rudbeckia 56
Ageratum 7	Cineraria 18	Gazania 26	Lobelia 33	Saintpaulia 56
Aloe 7	Clarkia 19	Geranium 26	Love Apple 33	Salpiglossis 56
Alstroemeria 7	Cleome 19	Gerbera 28	Lunaria 33	Salvia 58
Alyssum 7	Cobaea 19	Gesneria 27	Lupine 33	Sanvitalia, see 76
Amaranthus 8	COLEUS 20	Geum 27	Lychnis 37	Creeping Zinnia 76
Anchusa 8	Columbines, see 8	Gilia 27	MARIGOLD 34-36	Scabiosa 57
Anemone 8	Aquilegia 8	Gloxinia 28	Matricaria 36	Schefflera 27
Anthemis 8	Coreopsis 19	Gomphrena 28	Mesembryanthemum 37	Schizanthus 57
Aquilegia 8	Corn, Ornamental 19	Gourds 28	Mignonette 37	Sedum 57
Arabis 9	Cosmos 19	Grass, Ornamental 29	Mimosa 37	Shamrock 57
Armeria 9	Creeping Zinnia 76	Grevillea 29	Moonflower 37	Smilax 57
Asclepias 9	Crossandra 19	Gypsophila 29	Morning Glory 37	SNAPDRAGON 61-68
Asparagus 9, 27	Cuphea 19	Helianthemum 29	Myosotis 37	Statice 57
ASTER 9-11	CYCLAMEN 22	Helianthus 29	Naegelia 37	STOCKS 60
Aubrietia 12	Cynoglossum 22	Helichrysum 29	Nasturtium 37	Stokesia 68
Balsam 12	Dahlia 22	Heliotrope 29	Nemesia 38	Streptocarpus 68
Baptisia 12	Daisy 23	Helleborus 29	Nephthytis 27	SWEET PEAS 68
Basil 12	Datura 23	Herbs 79	Nicotiana 38	SWEET 16 SALES 68
BEGONIA 13	DELPHINIUM 24	Heuchera 29	Nierembergia 38	AIDS 4-5
Bellis 12	Dianthus 25	Hibiscus 29	Palm 27	Sweet William, 23
Bells of Ireland 14	Dicentra 23	Hollyhock 29	PANSY 40, 41	see Dianthus
Broom 14	Dictamnus 23	Hunemannia 32	Passiflora 38	Thunbergia 68
Browallia 14	Disiscus 23	Iberis 32	Pastemmon 39	Tithonia 68
Cactus 15	IMPATIENS 31	Pepper, Christmas 39	Peppercorn 39	Torenia 70
Calceolaria 15	Incarvillea 32	Perilla 39	PETUNIA 42-53	Tritoma 70
Calendula 15	Ipomoea, see Morning 37	Philodendron 27	Philodendron 27	Trolium 70
Campanula 16	Doronicum 23	Phlox 54	Physalis 39	VEGETABLE SEEDS 77-82
Candytuft 16	Dracena 23	Platycodon 39	Plumbago 39	Verbena 71
Canna 16	Dusty Miller 23	Polytrichum 39	Poppo 39	Vinca 70
Carnation 16	Echinops 23	Potulaca 53	Yucca 70	ZINNIA 72-76
Cassia 16	Eremurus 23			
Castor Bean, see 53	Euphorbia 26			
Ricinus 53	Exacum 26			

PLANTS (Pages 83-96)

Ageratum 96	Dianthus 96	Maranta 95	Phlox 96	Verbena 96
Alyssum 96	Dieffenbachia 94	Marigold 96	Pilea 95	Vinca 96
Bromeliads 94	Dracena 94	Nephthytis 95	Portulaca 96	Zinnia 96
Calamondin 94	Ficus 94	Orange, Miniature 94	Pothos 95	CHRYSANthemum 104-106
CARNATIONS 83-87	FOLIAGE PLANTS 94, 95	Pansies 96	ROSES 88-92	CUTTINGS 104-106
Chinese Evergreen 95	GERANIUMS 93	Peperomia 95	Salvia 96	
Coleus 96	Gloxinias 96	Petunias 96	Sansevieria 95	
Dahlia 96	Impatiens 96	PHILODENDRON 94, 95	Snaps 96	

BULBS (Pages 97-103)

Anemone 98	Canna 98, 101	GLOXINIAS 102	LILIES 97, 100
BEGONIAS, T.R. 99, 100	Daffodils 98	HYACINTHS 98, 102	Ranunculus 99
CALADIUMS 98, 101	GLADIOLI 99, 102	IRIS 98, 103	TULIPS 98, 99, 102

CONTAINERS & SUPPLIES (Pages 104-128)

Adhesives 109	Grower Talks Binder 16	MYLAR 108	Pot Labels 5, 128
BALL RED BOOK 12	Half Flats 120	Pano-drench 128	Ritter Plastic Pots 116
Bedding Plant Pamphlet 4	Handipanel 109	Perennial Pots 113	Rose Collars 122
Bird Bands & Pots 113	Heating Cable 128	Phosphon-D 69	Soil Screener 111
Black Shade Cloth 110	Herculite Pots 122	Picture Labels 4	Soil Shredder 111
Canvas Steam Hose 111	Jiffy-Pots, Retail 124	Plantnet Bench 110	Soil Sterilizer 111
Cycocel 117	Pks. 124	PlanTrays 114, 127	Stainless Steel Clip 109
E-FLOWMATIC	JIFFY-POTS 123-125	Plasticover 128	Tom Thumb Flats 113
Watering System 107	Jiffy-Strips 123-125	Polyethylene 110	Trox House 109
Fumicovers 111	Jumbo Picture Cards 5	POLY-PAKS 118	Veneer Plant Bands 114
Greenhouse Heaters 112	MARKET-PAKS 120	POLY-POTS 119	Veneer PlanTrays 114
Gre-Hose 110	Menne-Pots 113	POLY-TRAYS 126	Vibra-Seeder 128
GROWER TALKS 16	Morton Soil Drench 113	PORTA-TUBS 115	Visqueen 110
			Vita-Bands 113

We Also Issue the Ball Mum Guide. Write for Your Copy.

NOVEMBER 1962

S M T W T F S

4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

DECEMBER 1962

S M T W T F S

2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

1963

JANUARY

S M T W T F S

6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

FEBRUARY

S M T W T F S

3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

MARCH

S M T W T F S

3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

APRIL

S M T W T F S

5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

MAY

S M T W T F S

5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

JUNE

S M T W T F S

2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

JULY

S M T W T F S

7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

AUGUST

S M T W T F S

4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

SEPTEMBER

S M T W T F S

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

OCTOBER

S M T W T F S

6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

NOVEMBER

S M T W T F S

3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

DECEMBER

S M T W T F S

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

HOLIDAYS

Valentine's Day, Feb. 14

Easter, April 14, '63 —

March 29, '64.

Mother's Day, May 12

Memorial Day, May 30

All Saints Day, Nov. 1

Thanksgiving, Nov. 22, '62

— Nov. 28, '63

Christmas, Dec. 25

Bulbs

Containers

Seeds

Mums

Plants

